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SECTION 11 40 00 – FOOD SERVICE EQUIPMENT

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. This section includes the equipment as indicated on the foodservice drawings "FS" series of drawings

1.2 RELATED DOCUMENTS

- A. Drawings and other general provisions of Contract, including General and Supplementary
- B. Conditions and Division -1 Sections, apply to this Section.
- C. Division 22 Sections: Required drain traps, steam traps, atmospheric vents, valves, pipes and pipe fittings, duct work, and other materials necessary to complete mechanical hook up of food service equipment.
- D. Division 26 Sections: Wiring, disconnects, and other materials necessary to complete electrical hook up of food service equipment.
- E. Division 23 Sections: Ductwork, fans, drives and other materials necessary to complete the mechanical venting hook up of food service equipment.
- F. Food service equipment cutbook provided as a supplement to the 11 40 00 specifications.

1.3 SUBMITTALS

- A. Food Service Equipment Contractor shall coordinate submittal due dates with the Construction Schedule for this Project.
- B. Submit product data and installation instructions for each item; include rough-in dimensions, service connection requirements, performances, materials, manufacturers' model numbers, furnished accessories, power/fuel requirements, water/drainage requirements, and other similar information.
- C. Submit shop drawings including dimensioned rough-in drawings showing mechanical and electrical requirements. Submit dimensioned fabrication drawings for custom fabricated equipment including plans, elevations and sections, showing materials and gauges used.
- D. Submit maintenance data and parts lists for each item of food service equipment. Include data, product data, shop drawings, and wiring diagrams in maintenance manuals. Two copies of the manual are to be provided.
- E. All shop drawings to be produced in electronic CAD or BIM software and submitted in PDF format. All drawings must be submitted in black and white. Shop drawings containing line color other than black will be rejected. Shopk drawings to be submitted as one complete package. Shop drawings will be held and not reviewed until the entire package is received. Drawings to be submitted as one complete package using individual submittal numbers for each

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set of drawings. Electronic files with information beyond wall and equipment layout will not be made available to the contractor(s) under any circumstance. Schedules, rough-in layouts, general details, fabrication drawings will not be made available.

1.4 QUALITY ASSURANCE

- A. Manufacturers' Qualifications: Firms regularly engaged in manufacturer of food service equipment of types, capacities and sizes required, whose products have been in satisfactory use, in similar service, for not less than five projects.
- B. Installer's Qualifications: Engage an experienced installer who has completed food service similar in material, design, and extent to that indicated, for a project that has resulted in construction, with a record of successful in-service performance.

C. Codes and Standards:

- 1. NSF Standards: Comply with applicable National Sanitation Foundation (NSF) standards and recommended criteria. Provide each principal item of food service equipment with a NSF "seal of approval".
- 2. UL Labels: Where available, provide UL labels on prime electrical components of food service equipment. Provide UL "recognized marking" on other items with electrical components, signifying listing by UL, where available.
- 3. ANSI Standards: Comply with applicable ANSI standards for electric powered and gas burning appliances, for piping to compressed gas cylinders, and for plumbing fittings, including vacuum breakers and air gaps, to prevent siphonage in water piping.
- 4. NFPA Codes: Install food service equipment in accordance with the latest version of the following National Fire Protection Association (NFPA) codes:
 - a. NFPA 54 National fuel gas code.
 - b. NFPA 70 National electrical code.
 - c. NFPA 96 Removal of smoke and grease-laden vapors from commercial cooking equipment.
- 5. ASME Boiler Code: Construct steam-generating and closed steam heating equipment to comply with American Society of Mechanical Engineers (ASME) boiler and pressure vessel code; Section IV for units not exceeding 15 PSI or 250° F (121° C), or Section I for higher pressure/temperature units.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver food service equipment in containers designed to protect equipment and finish until final installation. Make arrangements to receive equipment and hold in warehouse until delivery can be made to job site.
- B. Store food service equipment in original containers and in location to provide adequate protection to equipment while not interfering with other construction operations.
- C. Handle food service equipment to avoid damage to components, enclosures and finish. Do not install damaged food service equipment; replace and return damaged components to equipment manufacturer.

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1.6 PROJECT CONDITIONS

- A. Take field measurements to assure accurate fit of fabricated equipment.
- B. Check electrical characteristics and water, steam and gas pressure. Provide pressure regulating valves where required for proper operation of equipment.

1.7 REFRIGERATION WARRANTY

- C. Special Project Warranty: Provide written warranty, signed by manufacturer, agreeing to replace/repair, within warranty period, refrigeration compressors with inadequate and defective materials and workmanship, including leakage, breakage, improper assembly, or failure to perform as required, provided manufacturer's instructions for handling, installing, protecting and maintaining units have been adhered to during warranty period. This warranty shall be in addition to, and not a limitation of, the rights the owner may have against the contractor under the Contract Documents.
- D. Warranty Period: 5 years from date of substantial completion.
- E. All equipment items containing refrigerated components are to include a minimum two-year parts and labor, five-year compressor warranty.

PART 2 - PRODUCTS

2.1 FOOD SERVICE EQUIPMENT SCHEDULE

A. Refer to the equipment schedules listed on the food service drawings for the food service equipment required for this project. Refer to the food service drawings for location of the items. Where discrepancies exist in quantity or size between drawings and schedules, the larger quantity/size must be considered as the correct information.

2.2 MATERIALS

- A. Stainless Steel: ANSI Type 304. Provide non-magnetic sheets, free of buckles, waves and surface imperfections. Provide No. 4 polished finish for exposed surfaces.
 - 1. Provide protective covering on polished surfaces of stainless steel sheet work, and retain/maintain until time of final testing, cleaning, start up and substantial completion.
- B. Galvanized Sheet Steel: ASTM A 526, except ASTM A 527 for extensive forming; ASTM A 525, G90 zinc coating, chemical treatment.
- C. Sheet Steel: ASTM A 569 hot rolled carbon steel.
- D. Stainless Steel Tube: ASTM A 554, type 304 with No. 4 polished finish.
- E. Aluminum: ASTM B 209 sheet and plate, ASTM B 221 extrusions, 0.40 mil clear anodized finish where exposed, unless otherwise indicated.
- F. White Metal: Corrosion resistant metal containing not less than 21 percent nickel. Make castings free from pit marks, runs, checks, burrs and other imperfections; rough grind, polish and buff to bright luster.
 - 1. In lieu of white metal castings, 18-8 stainless steel die cast or stamped may be used.

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- G. Plastic Laminate: NEMA LD3, general purpose high pressure type, 0.05 inch thick except 0.042 inch thick for flat work and post forming, smooth texture, and color white unless otherwise indicated.
- H. Plastic Materials and Components: Except for plastic laminate, provide plastic materials and components that comply with NSF 51.
- I. Hardwood Work Surfaces: Laminated edge-grained hard maple (acer Saccharum), NHLA first grade with knots, holes and other blemishes culled out, kiln dried at 8 percent or less moisture, waterproof glue, machined, sanded and finished with NSF approved oil sealer.
- J. Sound Deadening: Heavy bodied resinous coating, filled with granulated cork or other resilient material, compounded for permanent, non-flaking adhesion to metal in 1/8 inch thick coating.
 - 1. Apply coating of sound deadening material to underside of tops, drainboards, dishtables and sinks.
- K. Sealants: ASTM C 920; Type S, Grade NS, Class 25, Use NT. Provide sealant, that when fully cured and washed, meets requirements of Food and Drug Administration regulation 21 CFR 177.2600 for use in areas where it comes in contact with food.
 - 1. Color: As selected by architect with manufacturer's standard colors.
 - 2. Backer rod: Closed-cell polyethylene rod stock, larger than joint width.
- L. Gaskets: Solid or hollow (not cellular) neoprene or PVC; light gray, minimum 40 shore A hardness, self-adhesive or prepared for either adhesive application or mechanical anchorage.

2.3 FABRICATED PRODUCTS

- A. Refrigerator Hardware: Heavy duty, die cast zinc, chrome plated and polished.
 - 1. Hinges: Edge mounted, self-closing type.
 - 2. Latches: Edge mounted, arranged for locking devices.
- B. Handles and Pulls: Provide stainless steel handles with No. 4 finish, or die cast zinc with polished chrome-plated finish. Provide die stamped stainless steel pulls, recessed rectangular type, with beveled edge frame.
- C. Door Slides: Provide stainless steel or galvanized steel door slides with minimum load capacity of 100 pounds per pair, and with positive door stop. Provide ball bearing rollers.
- D. Hinges: Provide stainless steel hinges, continuous type or butt type as indicated.
- E. Sliding Door Hardware: Provide extruded aluminum door track. Provide galvanized steel door sheave with nylon surface and ball bearing inner races. Provide stainless steel bottom guide pins, spring loaded.
- F. Adjustable Shelf Supports: Provide stainless steel shelf supports, snap in type, and stainless steel brackets with countersunk mounting holes.
- G. Catches: For hinged doors, provide permanent magnetic catch of sufficient strength to hold door shut.
- H. Locks: Manufacturers standard brass 5-pin cabinet type lock. Provide two keys for each lock, keyed separately.

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- I. Lever Drains: Provide 2-inch, heavy cast bronze body, removable flat stainless steel strainer, twist handle waste outlet, and one piece connected chrome plated brass overflow.
- J. Casters: Provide minimum 4-inch diameter wheel casters with 1 1/8 inch tread width, complying with NSF standards. Provide sealed, self-lubricating bearings, cadmium plated or bright zinc plated steel disc wheels, and solid synthetic rubber tires. Provide foot brakes on 2 casters per unit.

2.4 FABRICATION OF EQUIPMENT

A. The following is a list of approved custom fabricators:

1.	Keystone Custom Fabricators - Elizabeth, PA	(412) 384-9131
2.	Bova Corporation – Valencia, PA	(724) 898-0288
3.	EMI Industries – Boonton, NJ	(860) 920-7300
4.	Titan Stainless – Rageland, SC	(704) 243-2717
5.	Kevry Stainless - Golden, CO	(303) 271-9300
6.	American Stainless - Englewood, CO	(303) 783-0005

- B. The owner/food service consultant reserves the right to accept or reject any custom fabrication manufacturer. Any deviation from the approved list of fabricators will require written authorization from the food service consultant prior to utilizing pricing from a proposed alternate fabricator.
- C. Tops: Fabricate of 14 gauge stainless steel, with exposed edges rolled on 1 1/2 inch diameter radius, and with corners bullnosed. Where tops are adjacent to walls or adjoining equipment, turn up ten inches and back two inches on a 45-degree angle, unless otherwise indicated.
 - 1. Backsplashes: Cove horizontal and vertical corners.
- D. Dishtables and Drainboards: Fabricate of 14 gauge stainless steel, with exposed edges formed into 1 1/2 inch by 180 degrees rolled rim, approximately 3 inches high. Provide built in pitch of 1/2-inch minimum. Provide ten inch high backsplashes with 2 inch return on 45 degree angle or 1 1/2 inch diameter rolled rim, as indicated. Construct front rim and backsplash on drainboards with continuous level plane with sink it adjoins. Support drainboards up to 36 inches in length, by 1-inch diameter stainless steel tube welded to underside of drainboard and leg gusset. Support drainboards 36 inches and longer with legs. Cove horizontal and vertical corners with not less than 3/4-inch radius.
- E. Framing: Mount tops on 4 inch wide by 14 gauge stainless steel channels.
 - 1. Run framework around entire perimeter of unit, and cross brace on centers. For dishtables and drainboards, run framing from front to back at each leg location, and run additional channel lengthwise, located at center of table width and welded to leg channels. Fasten framing to underside of top surfaces with 1/4-inch studs welded at approximately 12-inch centers. Provide each stud with suitable chrome plated lockwashers and capnuts, and make stud lengths such that capnuts can be made up tight bringing top down snugly to framing.

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- F. Legs and Cross Rails: Construct legs of 1 5/8 inch OD by 16 gauge stainless steel tubing, with fully enclosed stainless steel bullet shaped adjustable foot with minimum adjustment of 1 inch up or down without any threads showing. Fasten legs to 4-inch high stainless steel gusset with top completely sealed by means of stainless steel plate. Weld gusset continuously to bottom of unit framing. Construct cross rails of 1 1/4 inch O.D. by 16-gauge stainless steel tubing. Weld cross rails continuously to legs, grind and polish until smooth.
- G. Drawers: Lift out type drawer body, one piece 20 inch by 20 inch by 5 inch die stamped of 18 gauge stainless steel, with inside radiused corners. Construct front of double pan stainless steel, 16-gauge exterior and 20-gauge interior. Provide lock for each drawer.
 - 1. Fasten drawer suspension guides to 16-gauge stainless steel housing suspended from angle framing under fixed top.
- H. Cabinet Bodies: Construct of 18 gauge stainless steel, with end panels formed with round corners for freestanding units, and square corners for fixtures that adjoin walls or other fixtures. Provide 90-degree retentions on end panels at front and rear, turned in toward body of cabinet and welded for reinforcement. For cabinets with open shelving, provide double wall inner panels. Weld ends to horizontal angle or channel members to form integral cabinet base. Provide backs of same material as ends, with vertical edges turned in to match edges of ends. Weld making flush joint.
- I. Inserts: Where cold pans and other inserts are to be installed in cabinet bases, provide apron full depth of insert and of same material as bodies with reinforced openings as required. Form in openings on all sides.
- I. Sliding Doors: Construct of 18 gauge stainless steel with edges formed into channel extending around all sides, forming doors 7/8 inch thick. Insert sound deadening material, and enclose with stainless steel back panel with welded corner joints.
 - 1. Mount doors on sliding door hardware.
 - 2. Construct doors so as to be removable for cleaning purposes, and provide with stops.
 - 3. Provide, on each door, recessed stainless steel pulls and locks.
- J. Hinged Doors: Construct same as sliding doors. Mount on stainless steel continuous type hinges, fitted with stainless steel pulls, magnetic catches and locks. Construct so that door face is flush with cabinet body.
- K. Shelves: Construct of 14-gauge stainless steel.
 - 1. Bottom shelves: Extend forward and turn down at front so as to be flush with front facing of cabinet.
 - 2. Fixed intermediate shelves: Weld to front stiles and to 14 gauge stainless steel brackets so that shelf is 1 inch away from back and ends of cabinet.
 - 3. Adjustable shelves: Channel on all four sides, weld corners, and mount on removable stainless steel standards.
- L. Open Base Shelving: Construct of 16 gauge stainless steel with edges rolled down on open sides, and 2 inch turn up with 3/4 inch radius on rear and ends where adjacent to walls and other equipment. Neatly notch corners and weld to legs. Reinforce shelving longitudinally with 14 gauge formed channel welded to underside. Construct removable shelves as above, but fit

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- over cross rails. Do not exceed shelving sections of 30 inches long; where one section abuts another, turn down edges one inch.
- M. Wall Shelves: Construct of 16 gauge stainless steel with 1 1/2 inch roll on front and exposed ends, and with 2 inch turn up on back and ends where adjacent to walls or other fixtures. Weld all corners. Construct wall brackets of 14-gauge stainless steel with 1 1/2-inch flange at wall and completely welded to underside of shelf. Fasten each bracket to wall with minimum of two 1/2-inch bolts anchored to wall. Fasten shelf to wall bracket by means of studs welded to shelf, and secure with lockwasher and chrome plated cap nuts. Install so that shelf sets 1 1/2 inch away from the wall.
- N. Overshelves: Set shelves mounted over equipment, not adjacent to walls, on 1 inch by 14 gauge stainless steel tubular standards fitted with stainless steel base flanges. Completely weld top of tubular standards to 14-gauge stainless support channels; run channels full width of overshelf. Run 1/2-inch steel tension rods through counter tops and reinforcing angle framing, secure with nuts and lockwashers to assure stable sway-free structure.
 - 1. Where shelves are mounted over drainboards or dish tables, mount on upturned, rolled edges, omitting flanges, and scribe lower end of tube to match contour of roll.
- O. Sinks: Fabricate from 14 gauge stainless steel with interior corners rounded to 1 inch radius, both horizontally and vertically, forming cove in bottom. Construct with butt-edge joints, welded and ground smooth so no evidence of welding will appear. Divide multiple compartment sinks with double wall 14 gauge stainless steel partitions rounded to 1/2 inch radius on top and having corners rounded same as other corners in sinks, continuously welded in place with welds ground smooth and polished. Provide back, bottom and front of one continuous piece with no overlapping joints or open spaces between compartments. Pitch bottom of each compartment and crease to die stamped recess to receive lever type drain, without use of solder, rivets or welding.
 - 1. Finish front and exposed ends of sink with 1 1/2 inch 180 degree rolled edge. Finish back and ends adjacent to walls or other fixtures with splash back. Punch back splash back to receive wall mounted faucets.
 - 2. For sinks in worktops, construct as above, but omit roll edges with splash backs. Fabricate bowl so as to be flush with work surfaces.
- P. Cold Pans: Fabricate with 14-gauge stainless steel lining and 20 gauge stainless steel casing.
- Q. Cove interior horizontal and vertical corners. Insulate sides, ends and bottom with material thermally equal to 2-inch thickness of fiberglass. Sweat 1/2-inch diameter copper cooling coils to underside of cold pan, and seal in thermostatic material. Turn down countertop 1 inch into pan. Install completely concealed 1-inch wide plastic breaker strip. Install 1-inch chrome plated drain with plug. Provide 1/2 inch high false bottom of 14 gauge perforated stainless steel in removable sections.

2.5 EXHAUST HOOD FABRICATION

- A. Comply with NFPA 96, including appendix A.
- B. Grease Removal: Provide grease removal devices as called for in the itemized on the manufacturer's provided cutsheet and engineering data.

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C. Light Fixtures: Provide light fixtures as called for on the manufacturer's engineering drawings.

2.6 REFRIGERATION EQUIPMENT

- A. Provide refrigeration condensing units of size and capacities as indicated, consisting of compressors, condensers, receivers, motors, mounting bases, vibration isolators, refrigeration components, safety devices, electrical controls, refrigerant and protective controls, all factory assembled and tested.
 - 1. Refrigerant: Charge units with refrigerant. Provide direct connect type piping connections to receive piping from evaporator coils.
 - 2. Outdoor mounting: Provide weather tight housing and low ambient controls for units mounted outdoors.
- B. Refrigerant Piping: Type ACR copper tubing, hard temper, with wrought fittings and silver solder joints. Insulate suction lines with 1/2-inch pre-molded foamed plastic insulation.
- C. Electrical Wiring: Provide required wiring between electrical rough in and refrigeration units for proper operation.
- D. Plumbing Piping: Provide required water and drain piping between plumbing rough in and refrigeration units for proper operation.
- E. Refrigeration Specialties: Provide as indicated refrigerant dryer, liquid line solenoid valve, suction line filter, expansion valve and water regulating valve (for water cooled condensers only). Provide pump down control circuit consisting of thermostat and solenoid valve.

 Maintain box temperature from thermostat and liquid line solenoid valve; control compressor from suction pressure.

2.7 SUBSTITUTIONS

- A. In cases where multiple manufacturers have been listed in the itemized specifications, the model number and description indicated are for the first named manufacturer. Equivalent products produced by the other listed manufacturers will be acceptable for use on the project. All "like products" must be provided by one manufacturer. As an example, all reach-in and roll-in refrigerators and freezers must be manufactured by the same company. The food service consultant shall have authority and final say regarding the equivalency of the proposed 2nd and 3rd listed manufacturer's products, and what items are to be considered "like products".
- B. Refer to Section 01 "Substitution Process".
- C. Payment for all additional design, engineering and construction costs incurred, as a result of any substituted item, will be the responsibility of the food service equipment contractor. No additional compensation will be provided to cover these costs from the food service consultant. Purchasing and use of pre-owned equipment will be considered a substitution. Review of this equipment and any changes to layout and design as a result of substituted equipment will be invoiced on an hourly basis as additional services established in the architect/food service consultant design agreement.

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- D. Substitutions for any systems that have been custom engineered will need to be reengineered by the proposed substituted manufacturer based on their guidelines and listings. The engineering drawings and specifications will need to be forwarded to the food service consultant for evaluation.
- E. Substituted products must be accepted by the owner/client based taking into consideration the evaluation of the substituted products by the food service consultant.

PART 3 - EXECUTION

3.1 INSPECTION

A. Rough In Work: Examine roughed in mechanical and electrical services, installation of floors, walls, columns and ceilings, and other conditions under which food service work is to be installed; verify dimensions of services and substrates before fabricating work. Notify contractor of unsatisfactory locations and dimensions of other work and of unsatisfactory conditions for proper installation of food service equipment. Do not proceed with fabrication and installation until unsatisfactory dimensions and conditions have been corrected in a manner satisfactory to installer.

3.2 INSTALLATION

- A. Install all equipment, including any existing reused items, per manufacturer's recommendations.
- B. Set each item of non-mobile and non-portable equipment securely in place, level and adjust to correct height. Anchor to supporting substrate where indicated and where required for sustained operation and use without shifting or dislocating. Conceal anchorages where possible. Adjust countertops and other work surfaces to level tolerance of 1/16-inch maximum offset, and maximum variation from level or indicated slope of 1/16 inch per foot.
 - 1. Where indicated or required for safety of equipment operator, anchor equipment to floor or wall. Where equipment is indicated to be anchored to floor, provide legs with adjustable flanged foot. Install 2 anchors on each foot.
- C. Field Joints: Complete field assembly joints in work (joints cannot be completed in shop) by welding, bolting and gasketing, or similar methods as indicated. Grind welds smooth and restore finish. Set or trim gaskets flush, except for "T" gaskets as indicated.
- D. Enclosed Spaces: Treat spaces that are inaccessible, after equipment installation, by covering horizontal surfaces with powdered borax at the rate of 4 ounces per square foot.
- E. Closure Plates and Strips: Install where required with joints coordinated with units of equipment.
- F. Cutouts: Provide cutouts in food service equipment where required to run plumbing, electric, gas or steam lines through equipment items for final connection
- G. Sealants and Gaskets: Install all around each unit to make joints airtight, water tight, vermin proof and sanitary for cleaning purposes. In general, make sealed joints not less than 1/8 inch wide, and stuff backer rod to shape sealant bead properly at 1/4-inch depth. Shape exposed

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surfaces of sealant slightly concave with edges flush with faces of materials at joint. At internal corner joints, apply sealant or gaskets to form a sanitary cove of not less than 3/8-inch radius. Provide sealant filled or gasketed joints up to 3/4-inch joint width; metal closure strips for wider joints, with sealant application each side of strips. Anchor gaskets mechanically or with adhesives to prevent displacement.

3.3 FIELD QUALITY CONTROL

- A. Testing: Coordinate start up of food service equipment when service lines have been tested, balanced and adjusted for pressure, voltage and similar considerations. Do not operate steam lines until they have been cleaned and treated for sanitation. Before testing, lubricate each equipment item in accordance with manufacturers' recommendations.
 - 1. Test each item of operational equipment to demonstrate that it is operating properly and that controls and safety devices are functioning. Repair or replace equipment found to be defective in its operation, including units that are below capacity or operating with excessive noise or vibration.

3.4 CLEANING

- A. After completion of installation and other major work in food service areas, remove protective coverings, if any, and clean food service equipment, internally and externally. Restore exposed and semi-exposed finishes to remove abrasions and other damages; polish exposed metal surfaces and touch up painted surfaces. Replace work that cannot be successfully restored.
 - 1. Prior to date of substantial completion on food service equipment work, buff exposed stainless steel finishes lightly using power buffer and polishing rouge or grit of No. 400 or finer.
- B. Final Cleaning: After testing and start up, but before time of substantial completion, clean and sanitize food service equipment and leave in condition ready for food service.

3.5 CLOSEOUT PROCEDURES

- A. Provide services of installer's technical representative and manufacturers technical representative where required, to instruct owner's personnel in operation and maintenance of food service equipment.
 - 1. Schedule training with owner; provide at least 7 day notice to contractor and architect of training date

PART 4 - ITEMIZED SPECIFICATIONS

ITEM 1. HAND SINK WITH FAUCET by ADVANCE (Four Required)

These hand sinks with faucets are to be model # 7-PS-96 and are to be provided with the following features and accessories:

- A Deep drawn 10" x 14" x 5" sink bowl
- B Countertop die formed recessed edge with a 3/8" no-drip offset
- C Constructed of type 304 stainless steel
- D Model # K-310 drain strainer basket

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- E Two (2) side splashes
- F Built to allow for flush-to-wall mount application
- G Removable access panel
- H Galvanized wall mounting bracket
- I Foot pedal valve for water operation

ITEM 2. ROLL-IN PAN RACK by NEW AGE or CRESCOR (Five Required)

These mobile pan racks are to be model # 1335 B and are to include the following features and accessories:

- A Capacity of eighteen (18) 18" x 26" sheet pans on 3" centers
- B Universal angle to hold 18" x 26" and 12" x 20" pans
- C Lifetime construction warranty
- D Constructed of aluminum
- E Four (4) 5" platform type casters
- F Corner bumpers

ITEM 3. ONE SECTION GLASS DOOR REFRIGERATOR by VICTORY or TRAULSEN (Two Required)

These one section glass door refrigerators are to be model # RSA-1D-S1-GD-HC provided with full size door. The door is to be hinged right. These refrigerators are to have the following features and accessories:

- A Electronic controls that include on/off switch, interior light switch, temperature indicator, hi/lo audio/visual alarms, power supply interrupt alarm, door ajar alarm, and clean condenser alarm.
- B Top mounted self-contained 1/3 HP refrigeration system
- C To utilize R-134a refrigerant
- D Plasticized evaporator fin coils
- E Non-electric condensate evaporator
- F Foamed in place polyurethane insulation
- G Heavy duty cylinder locks
- H Life time guaranteed door handles
- I Stainless steel exterior and aluminum interior
- J Self closing doors with 120° hold open feature
- K Cam lift door hinges guaranteed for life
- L Proximity door switch for interior light control
- M One piece magnetic snap in door gaskets
- N Anti-condensate door perimeter heaters
- O Glass door with stainless steel frame
- P Thermal breaker caps guaranteed for life
- Q Four (4) epoxy coated wire shelves per compartment
- R 21.5 cubic foot net capacity
- S Cord and plug
- T LED interior lighting
- U Set of 6" overall height casters

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V - Three (3) year parts and labor warranty with five (5) year compressor warranty

ITEM 4. WORK COUNTER WITH SINK by CUSTOM FABRICATOR with FAUCET by T&S

This Custom Fabricated counter with sink is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

This T & S faucet is to be model # B-0221 and are to be provided with the following features and accessories:

- A Swivel base faucet
- B Deck mount mixing faucet on 8" centers
- C Lever handles
- D 12" swivel nozzle
- E B-0199-01F-10 aerator

ITEM 5. UNDERCOUNTER REFRIGERATOR by DELFIELD, RANDELL or CONTINENTAL (Three Required)

These undercounter refrigerators are to be model # GUR48P-S. The left door is to be hinged left and the right door is to be hinged right. These units are to be provided with the following features and accessories:

- A Stainless steel exterior and aluminum interior
- B Self-contained front breathing refrigeration system with non-electric condensate evaporator
- D 2" thick non-CFC polyurethane foam insulation
- E Spring loaded self-closing doors
- F Mounted on 2" casters
- G Equipped with two (2) epoxy coated shelves
- H 12.5 cubic foot capacity
- I Overall height of 32"
- J Equipped with cord and plug
- K Stainless steel case back and ends
- L Doors equipped with locks
- M Interior LED lighting
- N Two year parts and labor with five year compressor warranty

ITEM 6. MOBILE BUTCHER BLOCK TABLE by CUSTOM FABRICATOR

This Custom Fabricated mobile butcher block table is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

ITEM 7. OPEN HEARTH OVEN by WOODSTONE with GAS QUICK DISCONNECT by DORMONT

This Woodstone open hearth oven is to be model # WS-MS-6-RFG and is to be provided with the following features and accessories:

A - 36" x 10" high door opening

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- B 22 square feet of usable cooking deck space
- C Monolithic, cast-ceramic floor and dome with minimum thickness of 4"
- D Approved for installation with 1" of clearance to combustible materials
- E Tensioned steel exoskeleton connecting hearth and dome
- F Stainless steel front, sides, and back
- G Black powder coated steel oven support stand
- H Equipped with radiant and infrared bas fired burners for total heating capacity of 105,000 btu
- I 3/4" gas inlet and pressure regulator
- J Capacity of sixteen (22) 8" pizzas, ten (16) 10" pizzas, six (12) 12" pizzas, or four (8) 16" pizzas
- K Stainless steel mantle
- L Vented through Item 7a Stack Mounted Type I Hood
- M Factory prepared for field installed façade field applied tile façade by general contractor verify finish with architect
- N Hood and oven interlocked with 2-pole wall switch by electrical contractor
- O Supply with spare parts kit with smart valve, igniter, igniter gasket and steel box
- P Tool set that includes loading peel, utility peel, brush set, and bubble hook with stainless steel wall hangers for each accessory
- Q Cooking chamber opening to include sliding ceramic glass door capable of being left in any position selected by the operator
- R Manually adjustable wall of radiant flame located on left side with infrared burner beneath oven deck
- S Provide with stainless steel storage compartment mounted in support frame of unit
- T Oven to be factory mounted on temporary rigging casters for use during installation
- U Oven to be façade ready to receive tile finish as selected by architect

The Dormont Manufacturing Company gas connector kit is to be a model # 1675NPKIT Gas Connector Kit. Length to be 60".

ITEM 7a. TYPE I HOOD by WOODSTONE with CEILING CLOSURE PANEL by CUSTOM FABRICATOR

This Custom Fabricated closure panel is to be fabricated as per the custom fabrication details and general specifications.

This Woodstone type I hood is to be model # WS-FD-6045 curved face hood to service Item 7 and is to be provided with the following features and accessories:

- A Hood designed specifically to work with Item 7 Open Hearth Oven and to capture all exhaust coming from the oven flue collar and to draw warm air away from the front of the oven
- B Furnished with all mounting hardware
- C Constructed of 18-Gauge stainless steel
- D Baffle filter for grease removal
- E Hood to be UL, ULC and NSF listed/certified
- F Hood construction to meet NFPA-96 and the IMC
- G Pre-piped for Ansul system coverage

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- H Hood fan to operate from two pole wall mounted on/off switch furnished and installed by the electrical contractor
- I Verify front design with architect, curved or flat
- J Provide with custom 20 gauge stainless steel hood ceiling closure panel to match profile of hood and extend 2" above finished ceiling with all stainless steel fasteners concealed form view Provide shop drawing for approval
- K Hood manufacturer to provide stamped engineering drawings if required by the local authority having jurisdiction

ITEM 8. FIRE SUPPRESSION SYSTEM by ANSUL

This fire suppression system is to be model # R-102 for the Type I Hood (Item 7a) and is to be as follows:

- A Total system to include the following:
 - 1 The fire suppression system shall be the pre-engineered, liquid agent, cartridge-operated type with a fixed nozzle agent distribution network -It shall be listed with Underwriters Laboratories, Inc. (UL)
 - 2 The system shall be capable of automatic detection and actuation or remote manual actuation
 - 3 The system shall have fire suppression capabilities for the following hazard areas: ventilating structures including hoods, ducts, plenums, and filters; deep fat fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite or gas radiant char-broilers
 - 4 A systems owner's manual shall be provided containing basic information pertaining to system operation. A detailed technical manual shall provide system description, design, installation, recharge, and maintenance procedures, plus accessory installation and reset instructions.
- B The system shall be installed and serviced by authorized distributors that are trained and certified by the manufacturer.
- C System equipment is to include the following:
 - 1 The extinguishing agent shall be a potassium carbonate, potassium acetate-based formulation designed for flame knockdown and securement of grease related fires It shall be available with instructions for liquid agent handling and usage
 - 2 The agent tank(s) shall be installed in a stainless steel enclosure or wall bracket The tank(s) shall be stainless steel
 - 3 The tank(s) shall have a nominal capacity of either 1.5 gallon or 3 gallon with a working pressure of 100 psi, a test pressure of 300 psi, and a minimum burst pressure of 600 psi
 - The tank(s) shall include an adapter/tube assembly The adapter shall be chrome-plated steel with a 1/4-18 NPT female inlet and a 1/2-14 NPT male outlet The pick-up tube shall be carbon steel -1.2 in. O.D. by .028 wall A vent plug shall be integral to the adapter
- D The regulated release mechanism shall be the spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one or two agent tanks, depending on the capacity of the nitrogen cartridge used. It shall contain a factory

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installed regulator deadset at 100 psi with an internal relief of approximately 145 psi - In the "armed" position; the main spring force to the puncture pin piston shall be 150 pound

- E The mechanism shall have a visual indicator of the cocked or fired condition without having to open the enclosure
- F The regulated release mechanism shall have the following actuation capabilities: automatic actuation by a fusible link detection system; remote manual actuation by a mechanical pull station
- G The regulated release mechanism shall be compatible with mechanical gas line shutoff devices; or, when equipped with a field or factory-installed solenoid and switch, it shall be compatible with electric appliance shut-off devices
- H If more than two agent tanks are required, the regulated actuator(s) shall be available to provide expellant gas for additional tank(s) It shall be connected to the cartridge receiver outlet of the regulated release mechanism providing simultaneous agent discharge It shall contain a regulated actuator deadset at 100 psi with an internal relief of approximately 145 psi
- I The regulated actuator assembly shall contain a regulated actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover The enclosure shall contain knockouts to permit installation of expellant gas line
- J The tank/bracket assembly shall contain a welded steel bracket and agent tank The bracket shall be provided to mount the agent tank in a minimum amount of space The tank shall be secured with hinged brackets.
- K Each discharge nozzle shall be tested and listed with the system for specific applications The nozzle tip shall be chrome-plated brass, and stamped with the part number and flow rating The nozzle tip retainer and body shall be chrome plated brass The nozzle strainer shall be brass with stainless 50 mesh screen
- L Each nozzle tip shall be covered by a stainless steel protective blow-off cap
- M The regulated release mechanism shall be compatible with a fusible link detection system
- N The fusible link shall be selected and installed according to the operating temperature in the ventilation system
- O A detector bracket/linkage assembly shall support the fusible link. The detector bracket shall be 16-gauge cold-rolled stainless steel
- P The detector linkage shall be aluminum.
- Q The detector bracket/linkage assembly shall have provisions for connecting 1/2" rigid or EMT thin-wall conduit, and 1/16" diameter flexible stainless steel rope. Changes in direction of the conduit and steel rope shall be accomplished with die cast aluminum alloy, 90 degree pulley elbows
- R All exposed conduits are to be chrome plated
- S If the release mechanism is not accessible for manual actuation, a remote manual pull station(s) shall be provided as the primary means of manual actuation
- T The pull station(s) shall be the recessed type, with conduit run within the walls
- U The pull station(s) shall be the break-rod type, and shall be connected to the release mechanism trip lever by means of a 1/16" diameter stainless steel rope and 1/2" conduit (chrome plated conduit where exposed)

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- V The pull station(s) shall be located at a distance not more than 125 feet from the release mechanism
- W The mounting height and location of the pull station shall be in accordance with the authority having jurisdiction
- X A UL listed, electric snap-action switch shall be provided to shut off electrical power to appliances or to activate electrically operated devices. The switch shall allow for connection to the building alarm system A relay must be supplied if the equipment load exceeds the rated capacity of the switch
- Y This system shall conform to all local, state and national codes having jurisdiction in this location
- Z The installer shall provide one-year service and inspection free of additional charge
- AA Ansul distributor to provide engineered stamped drawings if required by the local area having jurisdiction

ITEM 9. ONE COMPARTMENT WALK-IN COOLER by TAFCO or AMERICAN PANEL

This one compartment walk-in cooler is to be the size and shape as shown on drawing FS1.1. Manufacturers' standard (actual) sizes and door locations are not acceptable unless they conform to the equipment plan. The height is to be 8'-6". It is to be constructed as one common unit. The entire unit will be built set on the building finished floor and utilize a 4" thick insulated floor. This walk-in is to include the following features and accessories:

- A Constructed of modular panels
- B Construction to be in strict compliance with NSF standard number 7 and in accordance to section 312 of the US Energy Bill H.R.6
- C Panels are to consist of interior and exterior metal surfaces precision roll formed to exact dimensions with double 90° edges. The finished metal surfaces are to be fitted with a tear drop profile gasket and placed in precision tooled fixtures where they are to be injected with foamed-in place urethane insulation.
- D Curing of the insulating core is to take place at a controlled temperature to provide permanent adhesion to the metal surfaces, to allow uniform foam expansion and to maximize finished panel strength
- E Panel edges to have molded urethane tongue and groove profile to accurately align panels during installation and to provide an air tight seal
- F All light fixtures to be vapor proof globe style fixtures equipped with LED bulbs
- G Panels to be 4" thick
- H Floor panels to have an NSF approved cove between the floor and walls
- I Floor panels are to be plywood reinforced constructed as "super floor" and are to be capable of supporting evenly distributed loads of 5,000 lbs. per square foot
- J Doors are to be flush mount, magnetic infitting type with door opening of 36" wide x 78" high
- K Perimeter of the doors and frames shall be built of fiberglass reinforced plastic (FRP) and shall house a door frame heater circuit, flexible bellows type vinyl door gasket with magnetic core, a magnet attracting stainless steel trim strip and flexible vinyl door sweep
- L Door frames to be provided with a vapor proof light fixture centered above the door with globe pre-wired to a rocker type light switch with pilot light, digital thermometer,

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- variable slide rheostat for heater wire control and a 14 gauge galvanized steel threshold plate
- M Door hardware to be die cast zinc with brushed satin finish
- N Doors to be mounted with three (3) heavy-duty cam lift hinges per door
- O Door pull handles to incorporate a keyed cylinder lock, provision for a separate padlock and Kason # 27C 1/4 turn inside safety release handle to prevent personnel entrapment
- P Doors to include a hydraulic closer device for positive door closing
- Q All doors to include strip curtains
- R Cooler doors to have insulation of at least R-25 and freezer doors to have insulation of at least R-32
- S Finishes are to be as follows:
 - 1 Unexposed exterior walls to be .032" mill finished stucco embossed aluminum
 - 2 Exposed exterior walls to be 22 gauge stucco embossed stainless steel
 - 3 Interior walls to be .032" mill finished stucco embossed aluminum
 - 4 Interior ceilings to be .032" mill finished stucco embossed aluminum, painted white
 - 5 Interior floor to be 1/8" aluminum diamond tread plate floor surface Grind off aluminum bumps at seams between floors panels so that adjoining floor panels can be pulled and sealed tight to each other
 - 6 Exterior floor to be 26 gauge stucco embossed galvalume
 - 7 Exterior ceiling to be 26 gauge stucco embossed galvalume
 - 8 Exposed exterior ceiling to match exposed exterior wall finish
 - 9 Interior/exterior doors and door frames to be have 36" high 1/8" diamond tread aluminum kick plate, installed flush with remaining finish remainder of door and frame to be 18 gauge stainless steel and to include a 14" x 14" heated view window in each door
- T Insulation to be 4" thick high pressure impingement mixed, foamed-in-place urethane, minimum 2.2 lb. per cubic foot density, fully heated cured and bonded to metal finishes
- U Minimum R-value for cooler walls, ceilings, and doors is to be R-25
- V Minimum R-value for freezer walls, ceilings, and doors is to be R-32
- W Minimum R-value for freezer floors is to be R-28
- X The insulation shall have a 97% closed cell structure
- Y Assembly of the walk-in is to be accomplished by the use of cam-locking mechanisms
- Z Cam lock spacing on vertical joints shall not exceed 46", or 23" from the junction of vertical and horizontal joints
- AA Cam locks to be foamed-in-place and anchored securely in the panel by steel wings integral to the lock housing
- BB Cam locks to be operated through access ports by the use of a hex wrench
- CC Access ports are to be on the walk-in interior and are to be covered by vinyl snap-in caps after final assembly
- DD Provide and install the following extra light fixtures:
 - 1 Cooler to include one (1) additional light fixture
- EE Heated vent port for the freezer

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- FF Provide and install matching stainless steel closure panels between walk-in walls and building walls Closure panels to be constructed of the same material as the exposed exterior walk-in walls
- GG Provide and install matching stainless steel closure panels from face of walk-in to a height of 1" above finished ceiling Closure panels to be constructed of the same material as the exposed exterior walk-in walls
- HH Provide and install bumper rail on exposed walk-in surfaces bumper rail to have black rubber bumper insert installed in extruded aluminum channel fastened at 10" and 34" above finished floor
- II Provide with diamond treadplate interior ramp with NSF cove
- JJ Verify all exterior finish colors with architect

ITEM 10. REFRIGERATION RACK SYSTEM by COLDZONE or COOLTECH

This refrigeration system is to be a pre-engineered and factory assembled unit, trade name "MINI-PAK" air-cooled outdoor refrigeration system. This rack system is to be located outdoors in a location as directed by the architect with a total refrigeration line run not to exceed 150' total with a 35' maximum vertical rise. Location to verified with architect.

This unit is to be an air-cooled model # MPL-1CZ provided with the following features and accessories:

The system shall be housed in a single, compact rustproof cabinet. The unit shall utilize multi-circuited air-cooled condensers for the walk-in coolers and freezer. The frame and base shall be comprised of 16 and 10-gauge all welded sheet steel, respectively. Hot-air discharge from the condenser fans shall be vertical. A venturi-contoured air-scoop shall be provided for each fan to reduce air turbulence and fan loading.

Fan blades shall be covered with a plastic coated fan guard. The unit shall be provided with single stage, semi-hermetic Copeland compressors, with individual air-cooled condensers operating within the recommended range of suction and discharge pressures.

Each condensing system shall be equipped with a new Copeland semi-hermetic compressor, dual pressure controls, suction-line vibration eliminator, and oversized receiver -- all of which shall be factory assembled.

Each condensing unit shall be equipped with a properly sized receiver with pump-down capacity large enough to accept the total liquid volume of refrigerant for all systems without exceeding 80% of its volumetric capacity. Each receiver shall be equipped with "king and queen" valves with service ports.

All compressor units shall be new factory assembled to operate with the refrigerant as noted above.

ELECTRICAL CONTROL PANEL

The refrigeration system shall have a factory-mounted and pre-wired (NEMA 3 EQV.) electrical control panel complete with industrial grade interlocked main-fused disconnect with separate compressor and fan motor circuit breakers, contactors and defrost time clocks for single point power connection. A photo etched wiring diagram made up of a .012 aluminum plate shall be permanently affixed inside the control panel.

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PRE-PIPING

All refrigerant lines shall be type "L" tubing and extended to one side of the package in a neat and orderly manner with ends of lines capped and identified by system using photoetched tags. All tubing shall be securely supported and anchored with uni-strut clamps. Suction lines shall be wrapped and insulated to prevent condensate accumulation. All piping shall be pressure-tested at the factory with nitrogen at 150 psi for low side and 400 psi for high side.

EVAPORATOR COILS

The evaporator coils shall include a compressor BTU matched low-profile end mount coil, thermostat, thermal expansion valve and liquid-line solenoid valve shipped loose.

INCLUSIONS

This system shall include but not be limited to the following components:

- A 0.8 H.P. medium temperature refrigeration system for the walk-in cooler with model # ZB06KAE compressor and model # CL6A066ADARE evaporator coil operating at 35°
- B 1/3 H.P. condenser fan motor
- C R-448A refrigerant to be used on all units
- D Cooler coil to include mounted air defrost timer
- E Freezer coil to be supplied with Econet adaptive defrost control
- F System designed to operate at 95 degree ambient temperature
- G Evaporators to be provided with high efficiency EC motors
- H All compressors to include crankcase heater and head pressure control
- I All evaporator coils to include matching thermostats, solenoid valves, and expansion valves
- J System to include main fused disconnect switch factory installed

REFRIGERATION INSTALLATION

Obtain all permits required for this installation, mount evaporator coils, provide and install refrigerant piping, fittings, hangers, support, hook-up and start-up as per manufacturers preparation and start-up procedures.

All copper tubing shall be refrigerant grade type "L". Sil-fos 15 shall be used, not soft solder. Insulate refrigerant piping as required with armaflex insulation. After the system and unit cooler have been connected, the balance of the system shall be leak-tested with all valves open.

The complete system shall be evacuated with a vacuum pump. Each system shall be charged with the refrigerant as specified by the manufacturer. Test and adjust each condensing unit to make the system operational.

Provide type "L" copper drain lines for walk-in refrigerators and freezers, pitched 1/4" per foot of run. Drain to be "P" trapped outside of refrigerated space to avoid entrance of warm, moist air or vermin. Provide drain line heater wrapped around the drain line for each unit

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cooler inside the freezer compartment. This drain line heater is to be insulated with Armaflex.

System installation to be performed by ColdZone factory authorized installer. Proof of authorization must be submitted with the manufacturer's shop drawing

ITEM 11. SHELVING by METRO (One Section Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

Each new shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Four (4) model # 1860K3 shelves
- B Four (4) model # 63UPK3 posts
- C Two (2) model # 5MP 5" non-marking polyurethane swivel casters
- D Two (2) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 12. NARROW 3-WELL REFRIGERATED COLD PAN by DELFIELD or RANDELL

This narrow 3-well refrigerated cold pan is to be model # N8168NBP and are to be provided with the following features and accessories:

- A 20-gauge stainless steel top construction
- B 2 BF stainless steel interior liner
- C Sectional removable perforated bottoms
- D Adapter bars are provided standard for 12" x 20" openings
- E Interior bottom sloped to 1" drain with valve
- F High density Non ODP foam insulation throughout unit
- G Galvanized exterior body
- H Narrow confirguation
- I Non-marring press fit top gasket
- J NSF-7 certified
- K Bottom mount compressor with stainless steel louver
- L Capacity of three 12"x20" pans
- M 1/6-HP self-contained refrigeration system utilizing R290 refrigerant
- N Two year parts/labor with five year compressor warranty
- O Provide with extended remote on/off switch

ITEM 13. DROP-IN HEATED SURFACE by HATCO (Six Required)

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These drop-in heated shelves are to be model # GRSB-36-F and is to be provided with the following features and accessories:

- A Hardcoated aluminum top and blanket-type foil element
- B Rocker switch control with pilot and thermostat
- C To include 6 foot cord and plug
- D Flush mount design with counter top flange

ITEM 14. DROP-IN HOT/COLD UNIT by LTI (Four Required) with DRAIN TEMPERING DEVICE by COOL DRAIN FLOW, INC. (Four Required)

These LTI hot/cold pans are to be model # DI-QSCHP-2 and are to be provided with the following features and accessories:

- A Solid state digital controls
- B 500 watt heat source
- C Single power connection
- D 1/2" turn down edge
- E Refrigeration system to be 1/3H.P self-contained system
- F R-507 (HFC) refrigerant
- G- Provided with cord and plug
- H Meets all NSF4 and NSF7 requirements
- I Drains manifolded to single point connection with individual valves
- J Capacity of two (2) 12"x20" food pans
- K Each well controlled individually and can used as either hot or cold

This CDF drain tempering device is to be model # DTV15

ITEM 15. SNEEZE GUARD WITH LIGHTS by ENGLISH MFG. or BRASS SMITH

This sneeze guard with lights is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Lights in location as indicated on custom fabrication details
- G Light housings to include same finish as posts

ITEM 16. VARIABLE VOLUME HOOD CONTROL SYSTEM by MELINK

This variable volume hood control system is to control the hood light(s) and fan speed(s) for Items 41 and 45 and is to be provided with the following features and accessories.

- A Melink system to be field installed by factory authorized technician as a preengineered system into Items 22, 29, 53, 61, 88, 99, and 150 Type I Hoods
- B Melink system to consist of the following components:

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- I/O Processor that sends 0-10VDC or 4-20mA signal to each exhaust fan or make-up air unit VFD
- 2 Keypad(s) to control lights and fans for all hoods connected to system (Keypads mounted locations as indicated on food service equipment plan)
- 3 Temperature sensors to monitor exhaust air temperature at duct
- 4 Optic sensors with APU to monitor smoke load inside hood
- 5 Electronic exhaust and make-up air motor starters to vary fan speed
- 6 Plug-n-play cables to link I/O processor to keypad, sensors, and VFDs
- C Pre-mount Melink system processor and auxiliary light controller in stainless steel cabinet and pre-wire system components at factory and mount in wall mounted location as shown on drawings FS1.1 and FS1.2
- D Melink to pre-program system based on application and include factory start-up
- E Electrical contractor to field wire I/O processor and branch to hood lights
- F Electrical contractor to field wire the electronic motor starter (VFDs) and branch to respective fans
- G Mechanical contractor to connect plug-n-play cables from I/O processor to each hood
- H Mechanical contractor to start up system and correct fan rotation if necessary
- I Air balance contractor to balance system per Melink system instructions
- J Melink system to be UL and CSA listed and to conform to NFPA 96, BOCA, SBCCI, ICBO, NSF, and CE
- K Melink system to be warranted against defects in material and workmanship for a period of three years from purchase date
- L Melink system to be furnished with the required exhaust and make-up air VFDs to service Items 22, 29, 53, 61, 88, 99, and 150. VFD's to be located in fourth floor mechanical room in location that is field coordinated with equipment being installed within this space by the other trades.
- M Melink system to be programmed for auto start/stop
- N Capable of controlling fan speeds from 50% to 100% based on temperature and optical effluent detection or at the speeds required to allow the exhaust and make-up air units function properly.
- O Locations of all VFD's to be confirmed with the mechanical engineer
- P Melink system to be capable of BacNet/MSTP controls interface for integration into the building automation system
- Q Exhaust fan VFD's to include bypass feature
- R System to include auxiliary light controllers as required
- S Melink to include two onsite visits, one reserved for coordination and system start-up and an additional visit to be onsite during balancing.

ITEM 17. UNDERCOUNTER PAN RACK by CAMBRO

This undercounter pan rack is to be model # UPR1826U15 with the following features and accessories:

- A Holds fifteen 18 x 26 or thirty 13 x 18 sheet pans on 1-1/2" rail spacing
- B Mobile end load
- C 31 1/2" high rack
- D Set of four 3" caster

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E - Top frame modeled to hold 18 x 26 sheet pan to protect product below

ITEM 18. WORK TOP REFRIGERATOR by DELFIELD or RANDELL

This work top refrigerator is to be model # GUR48P-S. The left door is to be hinged left and the right door is to be hinged right. This work top refrigerator is to be provided with the following features and accessories:

- A Stainless steel top, front, sides, and rear
- B Provided with two (2) adjustable powder coated shelves
- C 1/5 H.P. self-contained front breathing refrigeration system with condensate evaporator
- D 3" casters for a 34" tall working height
- E Cord and plug
- F 3 year parts and labor, five year compressor warranty
- G Each door equipped with locks
- H 18 gauge heavy duty top
- I Exterior thermometer

ITEM 19. ONE SECTION FREEZER by VICTORY, or TRAULSEN

This freezer is to be a model # FSA-1D-S-EW-HC provided with a full size door. The door is to be hinged right. This freezer is to have the following features and accessories:

- A Electronic controls that include on/off switch, manual defrost, interior light switch, temperature indicator, hi/lo audio/visual alarms, power supply interrupt alarm, door ajar alarm, and clean condenser alarm.
- B Top mounted self-contained 1/2 HP refrigeration system
- C Plasticized evaporator fin coils
- D Non-electric condensate evaporator
- E Foamed in place polyurethane insulation
- F Heavy duty cylinder locks
- G Life time guaranteed door handles
- H Stainless steel exterior and aluminum interior
- I Self closing doors with 120° hold open feature
- J Cam lift door hinges guaranteed for life
- K Proximity door switch for interior light control
- L One piece magnetic snap in door gaskets
- M Anti-condensate door perimeter heaters
- N Stainless steel interior door liner
- O Thermal breaker caps guaranteed for life
- P Four (4) epoxy coated wire shelves per compartment
- Q 24.4 cubic foot net capacity
- R Cord and plug
- S LED interior lighting
- T Set of 6" overall height casters
- U Three (3) year parts and labor warranty with five (5) year compressor warranty.

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ITEM 20. TWO SECTION REFRIGERATOR by VICTORY or TRAULSEN

This two section refrigerator is to be model # RSA-2D-S1-EW-HC provided with full size doors. The left door is to be hinged left and right door to be hinged right. This refrigerator is to have the following features and accessories:

- A Electronic controls that include on/off switch, interior light switch, temperature indicator, hi/lo audio/visual alarms, power supply interrupt alarm, door ajar alarm, and clean condenser alarm.
- B Top mounted self-contained 1/3 HP refrigeration system
- C To utilize R-290 refrigerant
- D Plasticized evaporator fin coils
- E Non-electric condensate evaporator
- F Foamed in place polyurethane insulation
- G Heavy duty cylinder locks
- H Life time guaranteed door handles
- I Stainless steel exterior and aluminum interior
- J Self closing doors with 120° hold open feature
- K Cam lift door hinges guaranteed for life
- L Proximity door switch for interior light control
- M One piece magnetic snap in door gaskets
- N Anti-condensate door perimeter heaters
- O Stainless steel interior door liner
- P Thermal breaker caps guaranteed for life
- Q Four (4) epoxy coated wire shelves per compartment
- R 49.02 cubic foot net capacity
- S Cord and plug
- T LED interior lighting
- U Set of 6" overall height casters
- V Three (3) year parts and labor warranty with five (5) year compressor warranty

ITEM 21. WORK COUNTER WITH SINK by CUSTOM FABRICATOR with FAUCET by T&S

This Custom Fabricated work counter is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

The T & S faucet is to be model # B-0221 and is to be provided with the following features and accessories:

- A Swivel base faucet
- B Deck mount mixing faucet on 8" centers
- C Lever handles
- D 12" swivel nozzle
- E B-0199-01F-10 aerator

ITEM 22. TYPE I HOOD by CADDY, GAYLORD, or HALTON

This Type I exhaust hood is to be built in two (2) sections consisting of model # PB-C-II-73-ND-60, and full-length ceiling supply plenums on both sides with size and shape as

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shown drawings FS1.1 and manufacturer's drawing MD-03160. This hood is to be provided with the following features and accessories:

- A Dimensions: Approximately 12'-2" long x 5'-0" deep x 2'-0" high
- B Hood shall be of the high velocity, dry centrifugal extractor type
- C Centrifugal grease extraction to be accomplished within the grease extraction chamber by means of strategically placed baffles located within the path of the high velocity air passing through the chamber. All baffles shall extend the full length of the ventilator. Grease extraction efficiencies to be not less than 95%. All extractor cartridges shall be fully removable. No fixed in place baffles are acceptable. Extractors to be easily removable from the floor by means of an extractor removal tool
- D Hood shall be equipped with a pitched trough with a removable grease collection located at one end
- E Hood shall operate as designed, utilizing exhaust air quantities as portrayed on the drawings
- F Hood shall be equipped with necessary hanger brackets at front and rear, for suspending from building overhead. Entire top perimeter at front and sides of hood shall be fully enclosed with matching removable stainless steel closure panels (if necessary) to 1" above the finished ceiling.
- G Hood shall be equipped with eight (8) LED light fixtures. Fixtures shall be vapor and greaseproof globe style fixtures, UL Listed for use in commercial kitchen hood applications. Light fixtures shall be factory pre-wired to a single connection point and include LED bulbs.
- H Hood to be UL Listed under the category "Grease Extractors for Exhaust Ducts", UL 710, in compliance with all recommendations of the National Fire Protection Association's standards for kitchen cooking equipment ventilators, approved by the National Sanitation
- I Foundation, approved by BOCA and ICBO, and be in accordance with all local codes having jurisdiction
- J Hood to be constructed of all stainless steel, # 18 gauge type 304, #4 finish, all welded, grease and water tight. No material other than that described above shall be deemed acceptable
- K The top of the hood canopy shall be reinforced with a 16 ga s/s channel running the length of the hood
- L Hood shall be mounted at 6'-8" AFF to bottom of front face
- M Hood to be supplied with full length ceiling supply plenum, with 40% open stainless steel perforated panels and volume control damper for discharge of tempered make-up air
- N Hood mounted control panel to control hood lights, fans, and interlocking of the temperature sensors, exhaust and supply fans for the exhaust hood.
- O Provide sliding balancing dampers for exhaust and supply duct collars.
- P Adjoining hood sections to include relieved center section to create continuous capture zone
- Q Melink Variable Volume Control System Item 16 to be integrated as a pre-engineered system into the hood including temperature sensors, optical sensors, and all Melink hood control components factory installed by the hood manufacturer.

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R - Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

ITEM 23. FIRE SUPPRESSION SYSTEM by ANSUL

This fire suppression system is to be model # R-102 for the Type I Hood (Item 22) and is to be as follows:

- A Total system to include the following:
 - 1 The fire suppression system shall be the pre-engineered, liquid agent, cartridgeoperated type with a fixed nozzle agent distribution network -It shall be listed with Underwriters Laboratories, Inc. (UL)
 - 2 The system shall be capable of automatic detection and actuation or remote manual actuation
 - 3 The system shall have fire suppression capabilities for the following hazard areas: ventilating structures including hoods, ducts, plenums, and filters; deep fat fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite or gas radiant char-broilers
 - 4 A systems owner's manual shall be provided containing basic information pertaining to system operation. A detailed technical manual shall provide system description, design, installation, recharge, and maintenance procedures, plus accessory installation and reset instructions.
- B The system shall be installed and serviced by authorized distributors that are trained and certified by the manufacturer.
- C System equipment is to include the following:
 - 1 The extinguishing agent shall be a potassium carbonate, potassium acetate-based formulation designed for flame knockdown and securement of grease related fires It shall be available with instructions for liquid agent handling and usage
 - 2 The agent tank(s) shall be installed in a stainless steel enclosure or wall bracket The tank(s) shall be stainless steel
 - 3 The tank(s) shall have a nominal capacity of either 1.5 gallon or 3 gallon with a working pressure of 100 psi, a test pressure of 300 psi, and a minimum burst pressure of 600 psi
 - 4 The tank(s) shall include an adapter/tube assembly The adapter shall be chrome-plated steel with a 1/4-18 NPT female inlet and a 1/2-14 NPT male outlet The pick-up tube shall be carbon steel -1.2 in. O.D. by .028 wall A vent plug shall be integral to the adapter
- D The regulated release mechanism shall be the spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one or two agent tanks, depending on the capacity of the nitrogen cartridge used. It shall contain a factory installed regulator deadset at 100 psi with an internal relief of approximately 145 psi In the "armed" position; the main spring force to the puncture pin piston shall be 150 pound
- E The mechanism shall have a visual indicator of the cocked or fired condition without having to open the enclosure

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- F The regulated release mechanism shall have the following actuation capabilities: automatic actuation by a fusible link detection system; remote manual actuation by a mechanical pull station
- G The regulated release mechanism shall be compatible with mechanical gas line shutoff devices; or, when equipped with a field or factory-installed solenoid and switch, it shall be compatible with electric appliance shut-off devices
- H If more than two agent tanks are required, the regulated actuator(s) shall be available to provide expellant gas for additional tank(s) It shall be connected to the cartridge receiver outlet of the regulated release mechanism providing simultaneous agent discharge It shall contain a regulated actuator deadset at 100 psi with an internal relief of approximately 145 psi
- I The regulated actuator assembly shall contain a regulated actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover The enclosure shall contain knockouts to permit installation of expellant gas line
- J The tank/bracket assembly shall contain a welded steel bracket and agent tank The bracket shall be provided to mount the agent tank in a minimum amount of space The tank shall be secured with hinged brackets.
- K Each discharge nozzle shall be tested and listed with the system for specific applications The nozzle tip shall be chrome-plated brass, and stamped with the part number and flow rating The nozzle tip retainer and body shall be chrome plated brass The nozzle strainer shall be brass with stainless 50 mesh screen
- L Each nozzle tip shall be covered by a stainless steel protective blow-off cap
- M The regulated release mechanism shall be compatible with a fusible link detection system
- N The fusible link shall be selected and installed according to the operating temperature in the ventilation system
- O A detector bracket/linkage assembly shall support the fusible link. The detector bracket shall be 16-gauge cold-rolled stainless steel
- P The detector linkage shall be aluminum.
- Q The detector bracket/linkage assembly shall have provisions for connecting 1/2" rigid or EMT thin-wall conduit, and 1/16" diameter flexible stainless steel rope. Changes in direction of the conduit and steel rope shall be accomplished with die cast aluminum alloy, 90 degree pulley elbows
- R All exposed conduits are to be chrome plated
- S If the release mechanism is not accessible for manual actuation, a remote manual pull station(s) shall be provided as the primary means of manual actuation
- T The pull station(s) shall be the recessed type, with conduit run within the walls
- U The pull station(s) shall be the break-rod type, and shall be connected to the release mechanism trip lever by means of a 1/16" diameter stainless steel rope and 1/2" conduit (chrome plated conduit where exposed)
- V The pull station(s) shall be located at a distance not more than 125 feet from the release mechanism
- W The mounting height and location of the pull station shall be in accordance with the authority having jurisdiction
- X A UL listed, electric snap-action switch shall be provided to shut off electrical power to appliances or to activate electrically operated devices. The switch shall allow for

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- connection to the building alarm system A relay must be supplied if the equipment load exceeds the rated capacity of the switch
- Y This system shall conform to all local, state and national codes having jurisdiction in this location
- Z The installer shall provide one-year service and inspection free of additional charge
- AA Pull stations for the fire suppression system are required to have color and numerical coded signs that correspond with the hood they service. Sign shall be engraved type with foam adhesive backing. Minimum size shall be no less than 2" x 5". Corresponding signs shall be placed at pull stations and on the hoods they service. Signs shall comply with any requirements set forth by the local and state authorities having jurisdiction.
- BB Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

ITEM 24. REFRIGERATED EQUIPMENT BASE by DELFIELD or TRAULSEN

This refrigerated equipment stand is to be model # F2975CP and is to be provided with the following features and accessories:

- A 18 gauge stainless steel top with flat top, exclude marine edge
- B 22 gauge stainless steel interior back and bottom with ABS thermoformed sides
- C Stainless steel finished front, both ends, and rear panel
- D 1/4 HP self contained refrigeration system using non ozone depleting refrigerant
- E Condensate evaporator
- F 12 gauge drawer frames
- G Capacity to hold six (6) 12"x 20" pans
- H Equipped with four (4) drawers
- I High density foamed in place polyurethane insulation
- J Mounted on 5" casters with front casters locking
- K- Cord and plug
- L Two (2) year parts and labor, five (5) year compressor warranty
- M Removable fold down 10" wide white poly full length cutting board
- N Provide submittal shop drawing for review and approval
- O Provide with drawer locks
- P Provide unit with six 12"x20"x4" deep stainless steel food pans

ITEM 25. TWENTY-FOUR INCH GRIDDLE by GARLAND, US RANGE, or MONTEGUE (Two Required) and QUICK GAS DISCONNECT by DORMONT (Two Required)

These twenty-four inch griddles are to be model # GTGG24-GT24M and are to be provided with the following features and accessories:

- A Stainless steel front, sides and back
- B Full spatula width front grease trough
- C Grease bucket capacity of 1-1/2 gallons
- D 1" polished steel griddle plate with 3" welded splash guards on both sides and rear
- E 4" stainless steel legs

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- F 23" deep grilling surface
- G Electronic spark ignition
- H Thermostat controls for temperature adjustment from 200 to 550 degrees F
- I 28,000 BTU burner for every 12" of griddle surface
- J 3/4" gas regulator

These Dormont Manufacturing Company gas quick disconnect kits are to be a model # 1675KIT2S Supr-Safe Gas Connector Kit with Supr-Swivel. Length to be 48".

ITEM 26. FORTY-EIGHT INCH GRIDDLE by GARLAND, US RANGE, or MONTEGUE (Three Required)

These Garland forty-eight inch griddles are to be model # GTGG48-GT48M and are to be provided with the following features and accessories:

- A Stainless steel front, sides and back
- B Full spatula width front grease trough
- C Grease bucket capacity of 1-1/2 gallons
- D 1" polished steel griddle plate with 3" welded splash guards on both sides and rear
- E 4" stainless steel legs
- F 23" deep grilling surface
- G Electronic spark ignition
- H Thermostat controls for temperature adjustment from 200 to 550 degrees F
- I 28,000 BTU burner for every 12" of griddle surface
- J 3/4" gas regulator

These Dormont Manufacturing Company gas quick disconnect kits are to be a model # 1675KIT2S Supr-Safe Gas Connector Kit with Supr-Swivel. Length to be 48".

ITEM 27. REFRIGERATED EQUIPMENT BASE by DELFIELD or TRAULSEN (Two Required)

This refrigerated equipment stands are to be model # F2952CP and are to be provided with the following features and accessories:

- A 18 gauge stainless steel top with flat top, exclude marine edge
- B 22 gauge stainless steel interior back and bottom with ABS thermoformed sides
- C Stainless steel finished front, both ends, and rear panel
- D 1/4 HP self contained refrigeration system using non ozone depleting refrigerant
- E Condensate evaporator
- F 12 gauge drawer frames
- G Capacity to hold four (4) 12"x 20" pans
- H Equipped with two (2) drawers
- I High density foamed in place polyurethane insulation
- J Mounted on 5" casters with front casters locking
- K- Cord and plug
- L Two (2) year parts and labor, five (5) year compressor warranty
- M Removable fold down 10" wide white poly full length cutting board
- N Provide submittal shop drawing for review and approval

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- O Provide with drawer locks
- P Provide unit with four 12"x20"x4" deep stainless steel food pans

ITEM 28. TWO SECTION FREEZER by VICTORY or TRAULSEN

This freezer is to be a model # FSA-2D-S1-HC provided with full size doors. The left door is to be hinged left and the right door to be hinged right. This freezer is to have the following features and accessories:

- A Electronic controls that include on/off switch, manual defrost, interior light switch, temperature indicator, hi/lo audio/visual alarms, power supply interrupt alarm, door ajar alarm, and clean condenser alarm.
- B Top mounted self-contained 3/4 HP refrigeration system
- C Plasticized evaporator fin coils
- D Non-electric condensate evaporator
- E Foamed in place polyurethane insulation
- F Heavy duty cylinder locks
- G Life time guaranteed door handles
- H Stainless steel exterior and aluminum interior
- I Self closing doors with 120° hold open feature
- J Cam lift door hinges guaranteed for life
- K Proximity door switch for interior light control
- L One piece magnetic snap in door gaskets
- M Anti-condensate door perimeter heaters
- N Stainless steel interior door liner
- O Thermal breaker caps guaranteed for life
- P Four (4) epoxy coated wire shelves per compartment
- Q 46.5 cubic foot net capacity
- R Cord and plug
- S LED interior lighting
- T Set of 6" overall height casters
- U Three (3) year parts and labor warranty with five (5) year compressor warranty

ITEM 29. TYPE I HOOD by CADDY, GAYLORD, or HALTON

This Type I exhaust hood is to be built in one (1) section consisting of model # PB-C-W-59-ND-54, with size and shape as shown drawings FS1.1 and manufacturer's drawing MD-03160. This hood is to be provided with the following features and accessories:

- A Dimensions: Approximately 5'-5" long x 4'-6" deep x 2'-0" high
- B Hood shall be of the high velocity, dry centrifugal extractor type
- C Centrifugal grease extraction to be accomplished within the grease extraction chamber by means of strategically placed baffles located within the path of the high velocity air passing through the chamber. All baffles shall extend the full length of the ventilator. Grease extraction efficiencies to be not less than 95%. All extractor cartridges shall be fully removable. No fixed in place baffles are acceptable. Extractors to be easily removable from the floor by means of an extractor removal tool

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- D Hood shall be equipped with a pitched trough with a removable grease collection located at one end
- E Hood shall operate as designed, utilizing exhaust air quantities as portrayed on the drawings
- F Hood shall be equipped with necessary hanger brackets at front and rear, for suspending from building overhead. Entire top perimeter at front and sides of hood shall be fully enclosed with matching removable stainless steel closure panels (if necessary) to 1" above the finished ceiling.
- G Hood shall be equipped with two (2) LED light fixtures. Fixtures shall be vapor and greaseproof globe style fixtures, UL Listed for use in commercial kitchen hood applications. Light fixtures shall be factory pre-wired to a single connection point and include LED bulbs.
- H Hood to be UL Listed under the category "Grease Extractors for Exhaust Ducts", UL 710, in compliance with all recommendations of the National Fire Protection Association's standards for kitchen cooking equipment ventilators, approved by the National Sanitation
- I Foundation, approved by BOCA and ICBO, and be in accordance with all local codes having jurisdiction
- J Hood to be constructed of all stainless steel, # 18 gauge type 304, #4 finish, all welded, grease and water tight. No material other than that described above shall be deemed acceptable
- K The top of the hood canopy shall be reinforced with a 16 ga s/s channel running the length of the hood
- L Hood shall be mounted at 6'-8" AFF to bottom of front face
- M Hood to be supplied with full length ceiling supply plenum, with 40% open stainless steel perforated panels and volume control damper for discharge of tempered make-up air
- N Hood mounted control panel to control hood lights, fans, and interlocking of the temperature sensors, exhaust and supply fans for the exhaust hood.
- O Provide sliding balancing dampers for exhaust duct collars.
- P Rear and right side of hood to include 3" integral air-gap for 0" clearance to combustible materials, air-gap to be integral to the hood and not visible from the outside faces
- Q Melink Variable Volume Control System Item 16 to be integrated as a pre-engineered system into the hood including temperature sensors, optical sensors, and all Melink hood control components factory installed by the hood manufacturer.
- R Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

ITEM 30. FIRE SUPPRESSION SYSTEM by ANSUL

This fire suppression system is to be model # R-102 for the Type I Hood (Item 29) and is to be as follows:

A - Total system to include the following:

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- 1 The fire suppression system shall be the pre-engineered, liquid agent, cartridgeoperated type with a fixed nozzle agent distribution network -It shall be listed with Underwriters Laboratories, Inc. (UL)
- 2 The system shall be capable of automatic detection and actuation or remote manual actuation
- 3 The system shall have fire suppression capabilities for the following hazard areas: ventilating structures including hoods, ducts, plenums, and filters; deep fat fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite or gas radiant char-broilers
- 4 A systems owner's manual shall be provided containing basic information pertaining to system operation. A detailed technical manual shall provide system description, design, installation, recharge, and maintenance procedures, plus accessory installation and reset instructions.
- B The system shall be installed and serviced by authorized distributors that are trained and certified by the manufacturer.
- C System equipment is to include the following:
 - 1 The extinguishing agent shall be a potassium carbonate, potassium acetate-based formulation designed for flame knockdown and securement of grease related fires It shall be available with instructions for liquid agent handling and usage
 - 2 The agent tank(s) shall be installed in a stainless steel enclosure or wall bracket The tank(s) shall be stainless steel
 - 3 The tank(s) shall have a nominal capacity of either 1.5 gallon or 3 gallon with a working pressure of 100 psi, a test pressure of 300 psi, and a minimum burst pressure of 600 psi
 - 4 The tank(s) shall include an adapter/tube assembly The adapter shall be chrome-plated steel with a 1/4-18 NPT female inlet and a 1/2-14 NPT male outlet The pick-up tube shall be carbon steel -1.2 in. O.D. by .028 wall A vent plug shall be integral to the adapter
- D The regulated release mechanism shall be the spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one or two agent tanks, depending on the capacity of the nitrogen cartridge used. It shall contain a factory installed regulator deadset at 100 psi with an internal relief of approximately 145 psi In the "armed" position; the main spring force to the puncture pin piston shall be 150 pound
- E The mechanism shall have a visual indicator of the cocked or fired condition without having to open the enclosure
- F The regulated release mechanism shall have the following actuation capabilities: automatic actuation by a fusible link detection system; remote manual actuation by a mechanical pull station
- G The regulated release mechanism shall be compatible with mechanical gas line shutoff devices; or, when equipped with a field or factory-installed solenoid and switch, it shall be compatible with electric appliance shut-off devices
- H If more than two agent tanks are required, the regulated actuator(s) shall be available to provide expellant gas for additional tank(s) It shall be connected to the cartridge receiver outlet of the regulated release mechanism providing simultaneous agent

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- discharge It shall contain a regulated actuator deadset at 100 psi with an internal relief of approximately 145 psi
- I The regulated actuator assembly shall contain a regulated actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover The enclosure shall contain knockouts to permit installation of expellant gas line
- J The tank/bracket assembly shall contain a welded steel bracket and agent tank The bracket shall be provided to mount the agent tank in a minimum amount of space The tank shall be secured with hinged brackets.
- K Each discharge nozzle shall be tested and listed with the system for specific applications The nozzle tip shall be chrome-plated brass, and stamped with the part number and flow rating The nozzle tip retainer and body shall be chrome plated brass The nozzle strainer shall be brass with stainless 50 mesh screen
- L Each nozzle tip shall be covered by a stainless steel protective blow-off cap
- M The regulated release mechanism shall be compatible with a fusible link detection system
- N The fusible link shall be selected and installed according to the operating temperature in the ventilation system
- O A detector bracket/linkage assembly shall support the fusible link. The detector bracket shall be 16-gauge cold-rolled stainless steel
- P The detector linkage shall be aluminum.
- Q The detector bracket/linkage assembly shall have provisions for connecting 1/2" rigid or EMT thin-wall conduit, and 1/16" diameter flexible stainless steel rope. Changes in direction of the conduit and steel rope shall be accomplished with die cast aluminum alloy, 90 degree pulley elbows
- R All exposed conduits are to be chrome plated
- S If the release mechanism is not accessible for manual actuation, a remote manual pull station(s) shall be provided as the primary means of manual actuation
- T The pull station(s) shall be the recessed type, with conduit run within the walls
- U The pull station(s) shall be the break-rod type, and shall be connected to the release mechanism trip lever by means of a 1/16" diameter stainless steel rope and 1/2" conduit (chrome plated conduit where exposed)
- V The pull station(s) shall be located at a distance not more than 125 feet from the release mechanism
- W The mounting height and location of the pull station shall be in accordance with the authority having jurisdiction
- X A UL listed, electric snap-action switch shall be provided to shut off electrical power to appliances or to activate electrically operated devices. The switch shall allow for connection to the building alarm system A relay must be supplied if the equipment load exceeds the rated capacity of the switch
- Y This system shall conform to all local, state and national codes having jurisdiction in this location
- Z The installer shall provide one-year service and inspection free of additional charge
- AA Pull stations for the fire suppression system are required to have color and numerical coded signs that correspond with the hood they service. Sign shall be engraved type with foam adhesive backing. Minimum size shall be no less than 2" x 5".

 Corresponding signs shall be placed at pull stations and on the hoods they service.

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Signs shall comply with any requirements set forth by the local and state authorities having jurisdiction.

BB - Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

ITEM 31. STAINLESS STEEL WALL PANELS by CUSTOM FABRICATOR

These stainless steel wall panels are to be constructed as per the detailed drawings, custom fabrication details and general specifications.

ITEM 32. FRYER SYSTEM with DUMP STATION and HEAT LAMP by DEAN with GAS QUICK DISCONNECT by DORMONT

This Dean fryer system with dump station and heat lamp is to include model # SCFD350G fryers on the right end of the battery with the dump station and heatlamp on the left end. The fryers are to include a Dean built-in fryer oil filtration system. This fryer battery is to be provided with the following features and accessories:

- A Thermo-tube design heat transfer system
- B Triple fryer system with oil capacity 50-lb. per fryer
- C 120,000 Btu/hr. burner
- D Frying area 14" x 14" x 3-1/2"
- E Thermatron controller
- F 1° compensating temperature probe
- G Stainless-steel frypot, door, front and sides
- H Two single baskets per fryer
- I 1" NPT gas connection
- J Combination gas valve with regulator
- K Wide cold zone
- L Melt cycle and boil-out mode
- M Entire fryer battery with dumpstation mounted on casters, front casters locking
- N Made integral with dumpstation dumpstation mounted on left end of fryer
- O Each fryer to be provided with top connecting strip and fry pot covers
- P Provide with a total of two (2) chicken baskets and two (2) full baskets
- Q To include matching Dean built-in fryer oil filtration system mounted in base of fryers

The Dormont Manufacturing Company gas connector kit is to be a model # 16125NPKIT Gas Connector Kit. Length to be 48".

ITEM 33. FOUR-WELL REFRIGERATED COLD PAN by DELFIELD or RANDELL

This refrigerated cold pan is to be model # N8157-FAP and is to be provided with the following features and accessories:

- A Top to be 20 gauges stainless steel
- B Interior liner to be 22 gauge stainless steel
- C Capacity of four (4) 12" x 20" 4" deep pans
- D 1/2 HP self contained refrigeration system using R290 refrigerant
- E Condensing unit mounted below cold pan in a 16 gauge steel frame

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- F Sides and bottom of pan to be wrapped with refrigeration lines and to be insulated with high density closed cell polyurethane
- G Condensing unit to have 22 gauge galvanized steel housing
- H Adjustable temperature control with On/Off switch
- I Black air deflectors to guide airscreen over flush mounted pans
- J One (1) year parts and labor, five (5) year compressor warranty
- K Remote extended on/off switch

ITEM 34. SNEEZE GUARD WITH HEATLAMP AND LIGHTS by ENGLISH or BRASS SMITH

This sneeze guard with lights and heatlamps are to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. These sneeze guards are to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Heatlamp with lights in location as indicated on custom fabrication details
- G Heatlamp and light housings to include same finish as posts
- H Lights to operate independent of heatlamps

ITEM 35. SNEEZE GUARD LIGHTS by ENGLISH or BRASS SMITH

This sneeze guard with lights is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Lights in location as indicated on custom fabrication details
- G Light housings to include same finish as posts

ITEM 36. FOUR WELL REFRIGERATED COLD PAN – EXISTING/RELOCATED (Two Required)

ITEM 37. SIXTY QUART MIXER by HOBART or GLOBE

This 60-quart mixer is to be model # HL662-1STD and is to be provided with the following features and accessories:

- A 2.7 HP high torque motor
- B Gear Transmission
- C Two (2) fixed speeds plus stir speed
- D Shift on the fly ability to change speeds while mixer is running

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- E Soft start agitation
- F 20 minute timer
- G Power bowl lift
- H Ergonomic Swing-Out Bowl
- I Stainless steel bowl guard
- J Metallic Gray Hybrid Powder Coat Finish
- K 6 foot flexible three-wire cord and plug
- L Transmission gears of constant mesh heat treated alloy steel
- M All bearings to be anti-friction ball bearing type
- N Hardened steel worm gear and special worm wheel to transmit power from the motor to the transmission, grease lubricated
- O Three speed operation
- P No. 12 attachment hub
- Q Metallic gray powder coat finish
- R Provided with standard accessory package and ED dough hook
- S Provide with bowl dolly

ITEM 38. FIVE WELL REFRIGERATED COLD PAN – EXISTING/RELOCATED

ITEM 39. SNEEZE GUARD WITH LIGHTS by ENGLISH MFG. or BRASS SMITH

This sneeze guard with lights is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Lights in location as indicated on custom fabrication details
- G Light housings to include same finish as posts

ITEM 40. VENTLESS PANINI by NEMCO (Two Required)

These ventless paninis are to be model # 6900-208-GG and are to be provided with the following features and accessories:

- A 2,000 watt heating element
- B Grooved upper and lower grill surfaces
- C Upper and lower grill surfaces can be operated independent of each other
- D Maximum temperature setting of 500°F
- E Mounted on 4" tall stainless steel legs
- F Capable of storing eight recipes available via push button controls and digital display
- G Non-stick 10-1/2"x10-1/2" cooking surface
- H Spring loaded upper plate automatically adjusts to product thickness
- I Body constructed of stainless steel
- J Equipped with cord/plug

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- K Integral recirculating catalytic converter for UL710B listed ventless operation
- L To include USB flash drive with software for custom recipe generation

ITEM 41. FOOD PROCESSOR by ROBOT COUPE

This food processor is to be a model # R2N and is to be provided with the following features and accessories:

- A 3-quart stainless steel cutter bowl with stainless steel "S" blade
- B Continuous feed attachment with discharge plates; one medium 5/64" grating plat and one 5/32" slicing plate
- C Fan cooled, heavy duty, 1/2 H.P. motor
- D Cord and plug

ITEM 42. ISLAND WORK COUNTER WITH SINK by CUSTOM FABRICATOR with FAUCET by T&S

This Custom Fabricated island work counter with sink is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

The T & S faucet is to be model # B-0221 and is to be provided with the following features and accessories:

- A Swivel base faucet
- B Deck mount mixing faucet on 8" centers
- C Lever handles
- D 12" swivel nozzle
- E B-0199-01F-10 aerator

ITEM 43. TWO SECTION GLASS DOOR REFRIGERATOR – EXISTING/RELOCATED (Two Required)

ITEM 44. SNEEZE GUARD WITH LIGHTS by ENGLISH MFG. or BRASS SMITH

This sneeze guard with lights is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Lights in location as indicated on custom fabrication details
- G Light housings to include same finish as posts

ITEM 45. DROP-IN SOUP WELL by VOLLRATH or WELLS (Two Required) with DRAIN TEMPERING DEVICE by COOL DRAIN FLOW, INC. (Two Required)

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These drop-in soup wells are to be model # 36465 and are to be provided with the following features and accessories:

- A 11 quart capacity with 720 watts
- B Stainless steel, deep-drawn construction, suitable for wet or dry operations
- C Heated by a tubular element positioned beneath the food well
- D Temperature to be controlled by an adjustable thermostat from OFF/LO to HI with a red indicator light when heating element is energized
- E Controls are recessed in a one-piece, drawn, front mounted panel
- F Provide with a 3/4" drain
- G Provide an inset with hinged lid
- H 1 year parts and labor warranty against defects

These Cool Drain Flow drain tempering devices are to be model # DTV15

ITEM 46. SNEEZE GUARD WITH LIGHTS by ENGLISH MFG. or BRASS SMITH

This sneeze guard with lights is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Lights in location as indicated on custom fabrication details
- G Light housings to include same finish as posts
- ITEM 47. ICE TEA BREWER by OWNER'S BEVERAGE VENDOR (Five Required)
- ITEM 48. ICE & SODA DISPENSER by OWNER'S BEVERAGE VENDOR (Three Required)

ITEM 49. UNDERCOUNTER ICE MAKER by FOLLETT (Three Required) and WATER FILTER by EVERPURE (Three Required)

These Follet undercounter ice makers are to be model # MCD425AHS and are to be provided with the following features and accessories:

- A Designed for use with ice and soda dispenser provided by owner
- B Undercounter air-cooled self-contained unit
- C Provide with 20' of flexible insulated ice transport tubing
- D Stainless steel exterior frame
- E Stainless steel evaporator, auger, and top bearing
- F Self-flushing
- G Mounted on slide-out undercounter frame kit with flexible water and drain connections provided by Follett
- H Three year parts and labor with five year compressor warranty
- I Factory authorized installation supervision and start-up

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- J Equipped with cord and plug connection
- K Capable of producing 425 lbs. of ice in 24 hours

These Everpure water filters are to be model # EV9324-01.

ITEM 50. FLAVORED WATER DISPENSER by OWNER'S BEVERAGE VENDOR (Two Required)

ITEM 51. SNEEZE GUARD WITH HEATLAMP AND LIGHTS by ENGLISH or BRASS SMITH (Two Required)

These sneeze guard with lights and heatlamps are to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. These sneeze guards are to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Heatlamp with lights in location as indicated on custom fabrication details
- G Heatlamp and light housings to include same finish as posts
- H Lights to operate independent of heatlamps

ITEM 52. WATER METER by DOYON

This water meter is to be model # WM45 and is to be provided with the following features and accessories:

- A Microcomputer controlled
- B Digital control panel
- C Rear mounted temperature probe with 6' tether
- D Stainless steel casing
- E Configurable for English or Metric settings
- F Dispensing hose with stainless steel hanging hook
- G Vacuum breaker

ITEM 53. TYPE I HOOD by CADDY, GAYLORD, or HALTON

This Type I exhaust hood is to be built in one (1) section consisting of model # PB-C-II-72-ND-62, with size and shape as shown drawings FS1.2 and manufacturer's drawing MD-03160. This hood is to be provided with the following features and accessories:

- A Custom size and shape as selected by the architect with overall dimensions: Approximately 6'-0" long x 5'-2" deep x 2'-0" high
- B Hood shall be of the high velocity, dry centrifugal extractor type
- C Centrifugal grease extraction to be accomplished within the grease extraction chamber by means of strategically placed baffles located within the path of the high velocity air passing through the chamber. All baffles shall extend the full length of the ventilator. Grease extraction efficiencies to be not less than 95%. All extractor cartridges shall

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- be fully removable. No fixed in place baffles are acceptable. Extractors to be easily removable from the floor by means of an extractor removal tool
- D Hood shall be equipped with a pitched trough with a removable grease collection located at one end
- E Hood shall operate as designed, utilizing exhaust air quantities as portrayed on the drawings
- F Hood shall be equipped with necessary hanger brackets at front and rear, for suspending from building overhead. Entire top perimeter at front and sides of hood shall be fully enclosed with matching removable stainless steel closure panels (if necessary) to 1" above the finished ceiling.
- G Hood shall be equipped with four (4) LED light fixtures. Fixtures shall be vapor and greaseproof globe style fixtures, UL Listed for use in commercial kitchen hood applications. Light fixtures shall be factory pre-wired to a single connection point and include LED bulbs.
- H Hood to be UL Listed under the category "Grease Extractors for Exhaust Ducts", UL 710, in compliance with all recommendations of the National Fire Protection Association's standards for kitchen cooking equipment ventilators, approved by the National Sanitation
- I Foundation, approved by BOCA and ICBO, and be in accordance with all local codes having jurisdiction
- J Hood to be constructed of all stainless steel, # 18 gauge type 304, #4 finish, all welded, grease and water tight. No material other than that described above shall be deemed acceptable
- K The top of the hood canopy shall be reinforced with a 16 ga s/s channel running the length of the hood
- L Hood shall be mounted at 6'-8" AFF to bottom of front face
- M Hood to be supplied with full length ceiling supply plenum, with 40% open stainless steel perforated panels and volume control damper for discharge of tempered make-up air
- N Hood mounted control panel to control hood lights, fans, and interlocking of the temperature sensors, exhaust and supply fans for the exhaust hood.
- O Provide sliding balancing dampers for exhaust duct collars.
- P Melink Variable Volume Control System Item 16 to be integrated as a pre-engineered system into the hood including temperature sensors, optical sensors, and all Melink hood control components factory installed by the hood manufacturer.
- Q Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

ITEM 54. FIRE SUPPRESSION SYSTEM by ANSUL

This fire suppression system is to be model # R-102 for the Type I Hood (Item 53) and is to be as follows:

A - Total system to include the following:

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- 1 The fire suppression system shall be the pre-engineered, liquid agent, cartridgeoperated type with a fixed nozzle agent distribution network -It shall be listed with Underwriters Laboratories, Inc. (UL)
- 2 The system shall be capable of automatic detection and actuation or remote manual actuation
- 3 The system shall have fire suppression capabilities for the following hazard areas: ventilating structures including hoods, ducts, plenums, and filters; deep fat fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite or gas radiant char-broilers
- 4 A systems owner's manual shall be provided containing basic information pertaining to system operation. A detailed technical manual shall provide system description, design, installation, recharge, and maintenance procedures, plus accessory installation and reset instructions.
- B The system shall be installed and serviced by authorized distributors that are trained and certified by the manufacturer.
- C System equipment is to include the following:
 - 1 The extinguishing agent shall be a potassium carbonate, potassium acetate-based formulation designed for flame knockdown and securement of grease related fires It shall be available with instructions for liquid agent handling and usage
 - 2 The agent tank(s) shall be installed in a stainless steel enclosure or wall bracket The tank(s) shall be stainless steel
 - 3 The tank(s) shall have a nominal capacity of either 1.5 gallon or 3 gallon with a working pressure of 100 psi, a test pressure of 300 psi, and a minimum burst pressure of 600 psi
 - 4 The tank(s) shall include an adapter/tube assembly The adapter shall be chrome-plated steel with a 1/4-18 NPT female inlet and a 1/2-14 NPT male outlet The pick-up tube shall be carbon steel -1.2 in. O.D. by .028 wall A vent plug shall be integral to the adapter
- D The regulated release mechanism shall be the spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one or two agent tanks, depending on the capacity of the nitrogen cartridge used. It shall contain a factory installed regulator deadset at 100 psi with an internal relief of approximately 145 psi In the "armed" position; the main spring force to the puncture pin piston shall be 150 pound
- E The mechanism shall have a visual indicator of the cocked or fired condition without having to open the enclosure
- F The regulated release mechanism shall have the following actuation capabilities: automatic actuation by a fusible link detection system; remote manual actuation by a mechanical pull station
- G The regulated release mechanism shall be compatible with mechanical gas line shutoff devices; or, when equipped with a field or factory-installed solenoid and switch, it shall be compatible with electric appliance shut-off devices
- H If more than two agent tanks are required, the regulated actuator(s) shall be available to provide expellant gas for additional tank(s) It shall be connected to the cartridge receiver outlet of the regulated release mechanism providing simultaneous agent

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- discharge It shall contain a regulated actuator deadset at 100 psi with an internal relief of approximately 145 psi
- I The regulated actuator assembly shall contain a regulated actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover The enclosure shall contain knockouts to permit installation of expellant gas line
- J The tank/bracket assembly shall contain a welded steel bracket and agent tank The bracket shall be provided to mount the agent tank in a minimum amount of space The tank shall be secured with hinged brackets.
- K Each discharge nozzle shall be tested and listed with the system for specific applications The nozzle tip shall be chrome-plated brass, and stamped with the part number and flow rating The nozzle tip retainer and body shall be chrome plated brass The nozzle strainer shall be brass with stainless 50 mesh screen
- L Each nozzle tip shall be covered by a stainless steel protective blow-off cap
- M The regulated release mechanism shall be compatible with a fusible link detection system
- N The fusible link shall be selected and installed according to the operating temperature in the ventilation system
- O A detector bracket/linkage assembly shall support the fusible link. The detector bracket shall be 16-gauge cold-rolled stainless steel
- P The detector linkage shall be aluminum.
- Q The detector bracket/linkage assembly shall have provisions for connecting 1/2" rigid or EMT thin-wall conduit, and 1/16" diameter flexible stainless steel rope. Changes in direction of the conduit and steel rope shall be accomplished with die cast aluminum alloy, 90 degree pulley elbows
- R All exposed conduits are to be chrome plated
- S If the release mechanism is not accessible for manual actuation, a remote manual pull station(s) shall be provided as the primary means of manual actuation
- T The pull station(s) shall be the recessed type, with conduit run within the walls
- U The pull station(s) shall be the break-rod type, and shall be connected to the release mechanism trip lever by means of a 1/16" diameter stainless steel rope and 1/2" conduit (chrome plated conduit where exposed)
- V The pull station(s) shall be located at a distance not more than 125 feet from the release mechanism
- W The mounting height and location of the pull station shall be in accordance with the authority having jurisdiction
- X A UL listed, electric snap-action switch shall be provided to shut off electrical power to appliances or to activate electrically operated devices. The switch shall allow for connection to the building alarm system A relay must be supplied if the equipment load exceeds the rated capacity of the switch
- Y This system shall conform to all local, state and national codes having jurisdiction in this location
- Z The installer shall provide one-year service and inspection free of additional charge
- AA Pull stations for the fire suppression system are required to have color and numerical coded signs that correspond with the hood they service. Sign shall be engraved type with foam adhesive backing. Minimum size shall be no less than 2" x 5".

 Corresponding signs shall be placed at pull stations and on the hoods they service.

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Signs shall comply with any requirements set forth by the local and state authorities having jurisdiction.

BB - Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

ITEM 55. SAUTE STATION by JADE with GAS QUICK DISCONNET by DORMONT

This Jade saute station is to be a model # JMSS-04-T-48 with refrigerated rail at the rear, refrigerated drawer base, and self-contained refrigeration system. This sauté station is to include the following features and accessories:

- A Self-contained refrigerated cold rail constructed with stainless steel and wrapped with refrigerated coils to maintain NSF-7 standards
- B Cold rail to be factory pre-piped to self-contained refrigeration system in base of saute station
- C 100% polyurethane "foamed in place insulation at raised rail
- D 3-burner open flame cook top
- E Refrigerated rail to include stainless steel removable night cover
- F Individual polished steel lift-off top grates
- G Each open burner is a 20,000 BTU/hr cast iron burner
- H 3/4" rear gas connection with pressure regulator
- I Cap and cover both ends of front manifold
- J Stainless steel front, sides and stub back
- K Stainless steel 6" plate shelf
- L Open burners and refrigerated rail to mounted on 48" wide model # JRLH-02S-T-48 refrigerated base with two drawers and self-contained refrigeration system
- M Compressor equipped with cord and plug
- N Refrigerated drawers to accommodate one (1) 12"x20"x6" deep food pan
- O Condensate evaporator
- P Entire unit to be mounted on 6" casters, front two locking
- Q Solid stainless steel finished rear panel

The Dormont Manufacturing Company gas connector kit is to be a model # 1675NPKIT Gas Connector Kit. Length to be 48".

ITEM 56. PROTECTOR GUARD by ENGLISH MFG. or BRASS SMITH

This protector guard is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This protector guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application

ITEM 57. SHELVING by METRO (One Section Required)

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This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

Each shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Four (4) model # 1836NK3 shelves
- B Four (4) model # 74UPK3 posts
- C Two (2) model # 5MP 5" non-marking polyurethane swivel casters
- D Two (2) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 58. INGREDIENT BIN by CAMBRO or RUBBERMAIDE (Two Required)

These ingredient bins are to be model # IBS20 and are to be provided with the following features and accessories:

- A Capacity of 21 gallons
- B One Piece, seamless single-wall polyethylene construction
- C Injection molded Camwear polycarbonate transparent lid
- D Slant top models include an S-hook on the front of the bin for hanging a scoop (scoop by others)
- E Injection molded polycarbonate transparent lid
- F Supplied with S-hook for hanging scoop (scoop by others)
- G Heavy duty 3" casters two (2) swivel and two (2) fixed bolted into steel plates

ITEM 59. SNEEZE GUARD WITH LIGHTS by ENGLISH MFG. or BRASS SMITH

This sneeze guard with lights is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Lights in location as indicated on custom fabrication details
- G Light housings to include same finish as posts

ITEM 60. ONE SECTION FREEZER by VICTORY or TRAULSEN

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This freezer is to be a model # FSA-1D-S1-HC provided with full size door. The door is to be hinged left. This freezer is to have the following features and accessories:

- A Electronic controls that include on/off switch, manual defrost, interior light switch, temperature indicator, hi/lo audio/visual alarms, power supply interrupt alarm, door ajar alarm, and clean condenser alarm.
- C Top mounted self-contained 1/3 HP refrigeration system
- D Plasticized evaporator fin coils
- E Non-electric condensate evaporator
- F Foamed in place polyurethane insulation
- G Heavy duty cylinder locks
- H Life time guaranteed door handles
- I Stainless steel exterior and aluminum interior
- J Self closing doors with 120° hold open feature
- K Cam lift door hinges guaranteed for life
- L Proximity door switch for interior light control
- M One piece magnetic snap in door gaskets
- N Anti-condensate door perimeter heaters
- O Stainless steel interior door liner
- P Thermal breaker caps guaranteed for life
- Q Four (4) epoxy coated wire shelves per compartment
- R 21.5 cubic foot net capacity
- S Cord and plug
- T LED interior lighting
- U Set of 6" overall height casters
- V Three (3) year parts and labor warranty with five (5) year compressor warranty

ITEM 61. TYPE I HOOD by CADDY, GAYLORD, or HALTON

This Type I exhaust hood is to be built in two (2) sections consisting of model # PB-C-I-68-ND-60 with full-length ceiling supply plenum and size and shape as shown drawings FS1.2 and manufacturer's drawing MD-03160. This hood is to be provided with the following features and accessories:

- A Dimensions: Approximately 10'-1" long x 5'-0" deep x 2'-0" high
- B Hood shall be of the high velocity, dry centrifugal extractor type
- C Centrifugal grease extraction to be accomplished within the grease extraction chamber by means of strategically placed baffles located within the path of the high velocity air passing through the chamber. All baffles shall extend the full length of the ventilator. Grease extraction efficiencies to be not less than 95%. All extractor cartridges shall be fully removable. No fixed in place baffles are acceptable. Extractors to be easily removable from the floor by means of an extractor removal tool
- D Hood shall be equipped with a pitched trough with a removable grease collection located at one end
- E Hood shall operate as designed, utilizing exhaust air quantities as portrayed on the drawings
- F Hood shall be equipped with necessary hanger brackets at front and rear, for suspending from building overhead. Entire top perimeter at front and sides of hood

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- shall be fully enclosed with matching removable stainless steel closure panels (if necessary) to 1" above the finished ceiling.
- G Hood shall be equipped with four (4) LED light fixtures. Fixtures shall be vapor and greaseproof globe style fixtures, UL Listed for use in commercial kitchen hood applications. Light fixtures shall be factory pre-wired to a single connection point and include LED bulbs.
- H Hood to be UL Listed under the category "Grease Extractors for Exhaust Ducts", UL 710, in compliance with all recommendations of the National Fire Protection Association's standards for kitchen cooking equipment ventilators, approved by the National Sanitation
- I Foundation, approved by BOCA and ICBO, and be in accordance with all local codes having jurisdiction
- J Hood to be constructed of all stainless steel, # 18 gauge type 304, #4 finish, all welded, grease and water tight. No material other than that described above shall be deemed acceptable
- K The top of the hood canopy shall be reinforced with a 16 ga s/s channel running the length of the hood
- L Hood shall be mounted at 6'-8" AFF to bottom of front face
- M Hood to be supplied with full length ceiling supply plenum, with 40% open stainless steel perforated panels and volume control damper for discharge of tempered make-up air
- N Hood mounted control panel to control hood lights, fans, and interlocking of the temperature sensors, exhaust and supply fans for the exhaust hood.
- O Provide sliding balancing dampers for exhaust and supply duct collars.
- P Adjoining hood sections to include relieved center section to create continuous capture zone
- Q 3" integral air gap at rear and left ends for 0" clearance to combustible, air-gaps to be built integral to the hood with non-visible seams from the exterior faces of the hood
- R Melink Variable Volume Control System Item 16 to be integrated as a pre-engineered system into the hood including temperature sensors, optical sensors, and all Melink hood control components factory installed by the hood manufacturer.
- S Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

ITEM 62. FIRE SUPPRESSION SYSTEM by ANSUL

This fire suppression system is to be model # R-102 for the Type I Hood (Item 61) and is to be as follows:

- A Total system to include the following:
 - 1 The fire suppression system shall be the pre-engineered, liquid agent, cartridge-operated type with a fixed nozzle agent distribution network -It shall be listed with Underwriters Laboratories, Inc. (UL)
 - 2 The system shall be capable of automatic detection and actuation or remote manual actuation

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- 3 The system shall have fire suppression capabilities for the following hazard areas: ventilating structures including hoods, ducts, plenums, and filters; deep fat fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite or gas radiant char-broilers
- 4 A systems owner's manual shall be provided containing basic information pertaining to system operation. A detailed technical manual shall provide system description, design, installation, recharge, and maintenance procedures, plus accessory installation and reset instructions.
- B The system shall be installed and serviced by authorized distributors that are trained and certified by the manufacturer.
- C System equipment is to include the following:
 - 1 The extinguishing agent shall be a potassium carbonate, potassium acetate-based formulation designed for flame knockdown and securement of grease related fires It shall be available with instructions for liquid agent handling and usage
 - 2 The agent tank(s) shall be installed in a stainless steel enclosure or wall bracket The tank(s) shall be stainless steel
 - 3 The tank(s) shall have a nominal capacity of either 1.5 gallon or 3 gallon with a working pressure of 100 psi, a test pressure of 300 psi, and a minimum burst pressure of 600 psi
 - The tank(s) shall include an adapter/tube assembly The adapter shall be chrome-plated steel with a 1/4-18 NPT female inlet and a 1/2-14 NPT male outlet The pick-up tube shall be carbon steel -1.2 in. O.D. by .028 wall A vent plug shall be integral to the adapter
- D The regulated release mechanism shall be the spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one or two agent tanks, depending on the capacity of the nitrogen cartridge used. It shall contain a factory installed regulator deadset at 100 psi with an internal relief of approximately 145 psi In the "armed" position; the main spring force to the puncture pin piston shall be 150 pound
- E The mechanism shall have a visual indicator of the cocked or fired condition without having to open the enclosure
- F The regulated release mechanism shall have the following actuation capabilities: automatic actuation by a fusible link detection system; remote manual actuation by a mechanical pull station
- G The regulated release mechanism shall be compatible with mechanical gas line shutoff devices; or, when equipped with a field or factory-installed solenoid and switch, it shall be compatible with electric appliance shut-off devices
- H If more than two agent tanks are required, the regulated actuator(s) shall be available to provide expellant gas for additional tank(s) It shall be connected to the cartridge receiver outlet of the regulated release mechanism providing simultaneous agent discharge It shall contain a regulated actuator deadset at 100 psi with an internal relief of approximately 145 psi
- I The regulated actuator assembly shall contain a regulated actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover The enclosure shall contain knockouts to permit installation of expellant gas line

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- J The tank/bracket assembly shall contain a welded steel bracket and agent tank The bracket shall be provided to mount the agent tank in a minimum amount of space The tank shall be secured with hinged brackets.
- K Each discharge nozzle shall be tested and listed with the system for specific applications The nozzle tip shall be chrome-plated brass, and stamped with the part number and flow rating The nozzle tip retainer and body shall be chrome plated brass The nozzle strainer shall be brass with stainless 50 mesh screen
- L Each nozzle tip shall be covered by a stainless steel protective blow-off cap
- M The regulated release mechanism shall be compatible with a fusible link detection system
- N The fusible link shall be selected and installed according to the operating temperature in the ventilation system
- O A detector bracket/linkage assembly shall support the fusible link. The detector bracket shall be 16-gauge cold-rolled stainless steel
- P The detector linkage shall be aluminum.
- Q The detector bracket/linkage assembly shall have provisions for connecting 1/2" rigid or EMT thin-wall conduit, and 1/16" diameter flexible stainless steel rope. Changes in direction of the conduit and steel rope shall be accomplished with die cast aluminum alloy, 90 degree pulley elbows
- R All exposed conduits are to be chrome plated
- S If the release mechanism is not accessible for manual actuation, a remote manual pull station(s) shall be provided as the primary means of manual actuation
- T The pull station(s) shall be the recessed type, with conduit run within the walls
- U The pull station(s) shall be the break-rod type, and shall be connected to the release mechanism trip lever by means of a 1/16" diameter stainless steel rope and 1/2" conduit (chrome plated conduit where exposed)
- V The pull station(s) shall be located at a distance not more than 125 feet from the release mechanism
- W The mounting height and location of the pull station shall be in accordance with the authority having jurisdiction
- X A UL listed, electric snap-action switch shall be provided to shut off electrical power to appliances or to activate electrically operated devices. The switch shall allow for connection to the building alarm system A relay must be supplied if the equipment load exceeds the rated capacity of the switch
- Y This system shall conform to all local, state and national codes having jurisdiction in this location
- Z The installer shall provide one-year service and inspection free of additional charge
- AA Pull stations for the fire suppression system are required to have color and numerical coded signs that correspond with the hood they service. Sign shall be engraved type with foam adhesive backing. Minimum size shall be no less than 2" x 5". Corresponding signs shall be placed at pull stations and on the hoods they service. Signs shall comply with any requirements set forth by the local and state authorities having jurisdiction.
- BB Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

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ITEM 63. STAINLESS STEEL WALL PANELS by CUSTOM FABRICATOR

These stainless steel wall panels are to be constructed as per the detailed drawings, custom fabrication details and general specifications.

ITEM 64. FRYER SYSTEM BY FRYMASTER with GAS QUICK DISCONNECT by DORMONT

This Frymaster fryer system is to be built as one common unit and mounted on casters. The dumpstation is to be on the left end with the fryer on the right end.

The one fryer is to be a model # FPH155 and are to include the following features and accessories:

- A Single open pot design
- B 50 lb oil capacity
- C Infrared 80,000 BTU burner
- D Stainless steel frypot, door, and ends
- E Deep frypot cold zone with forward sloping bottom
- F Frypot to include 1-1/4" ball valve
- G Electronic ignition
- H Automatic melt cycle and boil-out temperature control
- I Mounted on casters, front casters locking
- J Frypot cover
- K Rear gas connection
- L Built-in gas pressure regulator
- M Frymaster built-in filtration system mounted in fryer cabinets
- N Matching frymaster SC spreader cabinet mounted to left end of fryer battery
- O Dumpstation to be equipped with FWH-1A food warmer with scoop pan

The Dormont Manufacturing Company gas quick disconnect kit is to be a model # 1675KIT2S Supr-Safe Gas Connector Kit with Supr-Swivel. Length to be 48".

ITEM 65. DOUBLE DECK COMBI OVEN/STEAMER by ALTO-SHAAM or RATIONAL with WATER FILTERS by EVERPURE (Two Filters Required) and WATER QUICK DISCONNECT by DORMONT (Four Disconnects Required)

This Alto-Shaam double deck combination oven/steamer is to consist of two model # CTP6-10E stacked on each other and is to be provided with the following features and accessories:

- A Capable of cooking by internal product temperature or time with temperature variable steam, convection heat, or a combination of both to roast, steam, bake, or oven fry
- B Capacity of seven (7) 12"x20"x2-1/2" deep pans per compartment
- C Hands free positive catch door handle with lighted visual alerts
- D Control to include 2-speed, fan, cool-down function, and automatic decalcification program
- E Oven cavity to be constructed of 18 gauge stainless steel
- F Spray hose with backflow preventer
- G Automatic cleaning system for oven interior
- H Automatic steam venting
- I Browning Self-adjusting, flush mounted rotary door handle

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- J Two speed fan
- K Automatic decalcification program
- L Boiler free electric fired steam system
- M Oven cavity to be constructed of 18 gauge stainless steel
- N Touch screen control system
- O Provide with five (5) fry baskets
- P Door to be hinged right
- Q Furnish with cleaning tablet cleaning system
- R To include factory authorized installation, start-up, and check
- S Removable single point quick connect core temperature probe
- T Stacking kit to stack two CTP6-10E units below a hood mounted at 6'-8"-AFF
- U Provide with all stacking hardware, bottom unit to be mounted on casters

These Everpure water filters are to be model # EV9797-22 Kleensteam II Twin System

These Dormont water quick disconnects are to be model # W75BP2Q-60 and are to be provided with the following features and accessories:

- A Stainless steel braided hose coated with anti microbial PVC coating
- B To include one two-way disconnect coupling
- C Hose to be 36" long

ITEM 66. REFRIGERATED EQUIPMENT BASE by DELFIELD or CONTINENTAL

This refrigerated equipment stand is to be model # F236CP and is to be provided with the following features and accessories:

- A 18 gauge stainless steel top with flat top, exclude marine edge
- B 22 gauge stainless steel interior back and bottom with ABS thermoformed sides
- C Stainless steel finished front, both ends, and rear panel
- D 1/4 HP self contained refrigeration system using non ozone depleting refrigerant
- E Condensate evaporator
- F 12 gauge drawer frames
- G Capacity to hold three (3) 12"x 20" pans
- H Equipped with two (2) drawers
- I High density foamed in place polyurethane insulation
- J Mounted on 5" casters with front casters locking
- K- Cord and plug
- L Two (2) year parts and labor, five (5) year compressor warranty
- M Removable fold down 10" wide white poly full length cutting board
- N Provide submittal shop drawing for review and approval
- O Provide with drawer locks
- P Provide unit with three 12"x20"x4" deep stainless steel food pans

ITEM 67. UNDERCOUNTER HEATED CABINET by ALTO SHAAM (Two Required)

These undercounter heated cabinets are to be model # 750-S provided with a solid stainless steel door. These cabinets are to be provided with the following features and accessories:

A - Stainless steel interior to resists corrosion

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- B 20 gauge stainless steel exterior and door
- C Solid state controls with on/off switch; up and down arrow keys with temperature range of 60° to 200°
- D Heat indicator light; temperature display key and digital display
- E Provide with three (3) chrome plated racks
- F Eleven (11) pan positions spaced at 1-3/8" centers
- G Set of 2-1/2" swivel casters, two (2) with brakes
- H Standard door hinging
- I Doors equipped with locks
- J External drip trays

ITEM 68. DROP-IN HEATED SURFACE by HATCO

This drop-in heated shelf is to be model # GRSB-24-F and is to be provided with the following features and accessories:

- A Hardcoated aluminum top and blanket-type foil element
- B Rocker switch control with pilot and thermostat
- C To include 6 foot cord and plug
- D Flush mount design with counter top flange

ITEM 69. THREE WELL HOT/COLD PAN UNIT by LTI with DRAIN TEMPERING DEVICE by COOL DRAIN FLOW, INC.

This hot/cold pan is to be model # DI-QSCHP-3 and are to be provided with the following features and accessories:

- A Solid state digital controls
- B 500 watt heat source
- C Single power connection
- D 1/2" turn down edge
- E Refrigeration system to be 1/3H.P self-contained system
- F R-507 (HFC) refrigerant
- G- Provided with cord and plug
- H Meets all NSF4 and NSF7 requirements
- I Drains manifolded to single point connection with individual valves
- J Capacity of three (3) 12"x20" food pans
- K Each well controlled individually and can used as either hot or cold

This CDF drain tempering device is to be model # DTV15

ITEM 70. SNEEZE GUARD WITH HEATLAMP AND LIGHTS by ENGLISH or BRASS SMITH

This sneeze guard with lights and heatlamps is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered

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- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Heatlamp with lights in location as indicated on custom fabrication details
- G Heatlamp and light housings to include same finish as posts
- H Lights to operate independent of heatlamps

ITEM 71. ONE WELL REFRIGERATED COLD PAN by DELFIELD

This refrigerated cold pan is to be model # N8118B and is to be provided with the following features and accessories:

- A Top to be 20 gauges stainless steel
- B Interior liner to be 22 gauge stainless steel
- C Capacity of one (1) 12" x 20" 4" deep pans
- D 1/6 HP self contained refrigeration system using 134a refrigerant
- E Condensing unit mounted below cold pan in a 16 gauge steel frame
- F Sides and bottom of pan to be wrapped with refrigeration lines and to be insulated with high density closed cell polyurethane
- G Condensing unit to have 22 gauge galvanized steel housing
- H Adjustable temperature control with On/Off switch
- I One (1) year parts and labor, five (5) year compressor warranty
- J Provide with remote extended lead with on/off switch

ITEM 72. RICE COOKER by PANASONIC (Two Required)

These rice cookers are to be model # SR-GA421FH and are to be provided with the following features and accessories:

- A Capacity of 7.6 lbs. of raw rice
- B Capable of cooking 7.6 lbs, of raw rice in approximately 30 minutes
- C Built-in thermal safety fuse
- D Automatic shut-off
- E Stainless steel lid
- F Removable pan liner
- G NSF approved for commercial use

ITEM 73. MOBILE SNEEZE GUARDS by BRASS SMITH (Two Required)

These mobile sneeze guards are to be model # ZG9600 and are to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length mounted on mobile stand
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application

ITEM 74. WORK COUNTER WITH SINK by CUSTOM FABRICATOR with FAUCET by T&S

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This Custom Fabricated counter with sink is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

This T & S faucet is to be model # B-0221 and are to be provided with the following features and accessories:

- A Swivel base faucet
- B Deck mount mixing faucet on 8" centers
- C Lever handles
- D 12" swivel nozzle
- E B-0199-01F-10 aerator

ITEM 75. COFFEE BREWER by OWNER'S BEVERAGE VENDOR

ITEM 76. REFRIGERATED MERCHANDISER by VOLLRATH

This refrigerated merchandiser to be model # 40887-RDE8448 and are to be provided with the following features and accessories:

- A Interior lighting
- B 1/3-HP, self-contained refrigeration with dual fans
- C Case defrost mode
- D Three (3) shelves
- E provided with cord and plug
- F Double glazed front sliding glass doors
- G Customer side doors for self-serve

ITEM 77. SPARE NUMBER

ITEM 78. UNDERCOUNTER REFRIGERATOR by DELFIELD or RANDELL

This undercounter refrigerator is to be model # GUR32P-D. This unit is to be provided with the following features and accessories:

- A Stainless steel top and front
- B Exterior thermometer
- C Integral drawer handles
- D 1/4 HP self contained refrigeration system using non ozone depleting refrigerant
- E Condensate evaporator
- F 12 gauge drawer frames
- G Capacity to hold twelve 1/6 pans, 6" deep
- H Equipped with two (2) drawers
- I High density foamed in place polyurethane insulation
- J Mounted on 2" casters with front casters locking
- K- Cord and plug
- L Two (2) year parts and labor, five (5) year compressor warranty
- M Provide with drawer locks
- N Provide unit with twelve 1/6 size 6" deep stainless steel food pans

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- ITEM 79. SILK MILK DISPENSER by OWNER'S BEVERAGE VENDOR
- ITEM 80. MILK DISPENSER EXISTING/RELOCATED (Two Required)
- ITEM 81. CEREAL DISPENSER by OWNER (Eight Required)
- ITEM 82. JUICE DISPENSER by OWNER'S BEVERAGE VENDOR

ITEM 83. WAFFLE BATTER DISPENSER by NEMCO

This waffle batter dispenser is to be a model # 7050 and is to be provided with the following features and accessories:

- A Stainless steel cabinet body
- B Eight quart capacity
- C Soda machine style dispensing valve
- D Stainless steel front access door with waffle signage

ITEM 84. WAFFLE IRON by STAR (Two Required)

This waffle irons are to be model # SWBS and are to be provided with the following features and accessories:

- A Programmable electronic controls and timer for simple
- B Seven inch diameter cast aluminum grids
- C Elements are cast into the upper and lower grids
- D Real time temperature display readout
- E Audible end of bake cycle alarm
- F Handle is nickel-plated steel with an open-coil design and heat-resistant coating
- G Stainless steel top, front, sides and drip trays
- H Durable stainless steel hinge with heavy-duty bearing

ITEM 85. CONDIMENT WARMER WITH LADDLE by APW WYOTT

This condiment warmer with pump is to be model # LW-4PKG and is to be provided with the following features and accessories:

- A 4 quart heated well
- B Adjustable thermostat
- C Stainless steel front panel with black vinyl clad instruction panel
- D Accommodates a #10 tin
- E Constructed with stainless steel corrosion resistant heat wells
- F Lighted on-off switch
- G Equipped with cord and plug
- H Stainless steel lid and one ounce ladle
- I One year parts and labor warranty

ITEM 86. FOUR SLICE TOASTER by HATCO (Two Required)

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These four slice toasters are to be model # TPT-120 and are to be provided with the following features and accessories:

- A Capacity of 150 slices per hour
- B Pop-up operation
- C Total of four (4) toasting chambers
- D Four (4) slots that are to be 1-1/8" wide
- E Each toasting chamber to be equipped with oven guide wires and lowering rack
- F Constructed of formed and welded sheet steel
- G Exterior finish to be brushed stainless steel with a bright anneal finish on the front panel
- H Total of 2.0 KW
- I Insulated ceramic etched foil heaters to be installed on both sides of each toasting chambers
- J Each two slot section to be controlled by a lever operated mechanism and to include color selector knobs with solid state controls having temperature and voltage compensators

ITEM 87. SOFT SERVE DISPENSER by TAYLOR (Two Required)

These soft serve dispensers are to be model # C712 and are to be provided with the following features and accessories:

- A Two, 3.4 quart freezing cylinders
- B Two, 20 quart mixing hoppers
- C Two, 1-1/2-HP self-contained refrigeration systems utilizing R-404A refrigerant
- D Digital controls with indicator lights for mix low, mix out, and hours since last brush cleaning
- E Microprocessor touch controls
- F Standby feature
- G Mounted on cart with casters and door
- H Door interlock system
- I Provide with drain adapter for cleaning
- J Draw valve lock kit
- K Hopper agitators
- L Entire unit mounted on casters, front casters locking
- M Factory authorized start-up and training

ITEM 88. TYPE I HOOD by CADDY, GAYLORD, or HALTON

This Type I exhaust hood is to be built in one (1) section consisting of model # PB-C-I-73-ND-60, with size and shape as shown drawings FS1.2 and manufacturer's drawing MD-03160. This hood is to be provided with the following features and accessories:

- A Dimensions: Approximately 6'-4" long x 5'-0" deep x 2'-0" high
- B Hood shall be of the high velocity, dry centrifugal extractor type
- C Centrifugal grease extraction to be accomplished within the grease extraction chamber by means of strategically placed baffles located within the path of the high velocity air passing through the chamber. All baffles shall extend the full length of the ventilator.

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Grease extraction efficiencies to be not less than 95%. All extractor cartridges shall be fully removable. No fixed in place baffles are acceptable. Extractors to be easily removable from the floor by means of an extractor removal tool

- D Hood shall be equipped with a pitched trough with a removable grease collection located at one end
- E Hood shall operate as designed, utilizing exhaust air quantities as portrayed on the drawings
- F Hood shall be equipped with necessary hanger brackets at front and rear, for suspending from building overhead. Entire top perimeter at front and sides of hood shall be fully enclosed with matching removable stainless steel closure panels (if necessary) to 1" above the finished ceiling.
- G Hood shall be equipped with three (3) LED light fixtures. Fixtures shall be vapor and greaseproof globe style fixtures, UL Listed for use in commercial kitchen hood applications. Light fixtures shall be factory pre-wired to a single connection point and include LED bulbs.
- H Hood to be UL Listed under the category "Grease Extractors for Exhaust Ducts", UL 710, in compliance with all recommendations of the National Fire Protection Association's standards for kitchen cooking equipment ventilators, approved by the National Sanitation
- I Foundation, approved by BOCA and ICBO, and be in accordance with all local codes having jurisdiction
- J Hood to be constructed of all stainless steel, # 18 gauge type 304, #4 finish, all welded, grease and water tight. No material other than that described above shall be deemed acceptable
- K The top of the hood canopy shall be reinforced with a 16 ga s/s channel running the length of the hood
- L Hood shall be mounted at 6'-8" AFF to bottom of front face
- M Hood to be supplied with full length ceiling supply plenum, with 40% open stainless steel perforated panels and volume control damper for discharge of tempered make-up air
- N Hood mounted control panel to control hood lights, fans, and interlocking of the temperature sensors, exhaust and supply fans for the exhaust hood.
- O Provide sliding balancing dampers for exhaust duct collars.
- P Customer facing and right side of hood to include 3" integral air-gap for 0" clearance to combustible materials, air-gap to be integral to the hood and not visible from the outside faces
- Q Melink Variable Volume Control System Item 16 to be integrated as a pre-engineered system into the hood including temperature sensors, optical sensors, and all Melink hood control components factory installed by the hood manufacturer.
- R Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

ITEM 89. FIRE SUPPRESSION SYSTEM by ANSUL

This fire suppression system is to be model # R-102 for the Type I Hood (Item 88) and is to be as follows:

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A - Total system to include the following:

- 1 The fire suppression system shall be the pre-engineered, liquid agent, cartridgeoperated type with a fixed nozzle agent distribution network -It shall be listed with Underwriters Laboratories, Inc. (UL)
- 2 The system shall be capable of automatic detection and actuation or remote manual actuation
- 3 The system shall have fire suppression capabilities for the following hazard areas: ventilating structures including hoods, ducts, plenums, and filters; deep fat fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite or gas radiant char-broilers
- 4 A systems owner's manual shall be provided containing basic information pertaining to system operation. A detailed technical manual shall provide system description, design, installation, recharge, and maintenance procedures, plus accessory installation and reset instructions.
- B The system shall be installed and serviced by authorized distributors that are trained and certified by the manufacturer.
- C System equipment is to include the following:
 - The extinguishing agent shall be a potassium carbonate, potassium acetate-based formulation designed for flame knockdown and securement of grease related fires It shall be available with instructions for liquid agent handling and usage
 - 2 The agent tank(s) shall be installed in a stainless steel enclosure or wall bracket The tank(s) shall be stainless steel
 - 3 The tank(s) shall have a nominal capacity of either 1.5 gallon or 3 gallon with a working pressure of 100 psi, a test pressure of 300 psi, and a minimum burst pressure of 600 psi
 - The tank(s) shall include an adapter/tube assembly The adapter shall be chrome-plated steel with a 1/4-18 NPT female inlet and a 1/2-14 NPT male outlet The pick-up tube shall be carbon steel -1.2 in. O.D. by .028 wall A vent plug shall be integral to the adapter
- D The regulated release mechanism shall be the spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one or two agent tanks, depending on the capacity of the nitrogen cartridge used. It shall contain a factory installed regulator deadset at 100 psi with an internal relief of approximately 145 psi In the "armed" position; the main spring force to the puncture pin piston shall be 150 pound
- E The mechanism shall have a visual indicator of the cocked or fired condition without having to open the enclosure
- F The regulated release mechanism shall have the following actuation capabilities: automatic actuation by a fusible link detection system; remote manual actuation by a mechanical pull station
- G The regulated release mechanism shall be compatible with mechanical gas line shutoff devices; or, when equipped with a field or factory-installed solenoid and switch, it shall be compatible with electric appliance shut-off devices
- H If more than two agent tanks are required, the regulated actuator(s) shall be available to provide expellant gas for additional tank(s) It shall be connected to the cartridge

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- receiver outlet of the regulated release mechanism providing simultaneous agent discharge It shall contain a regulated actuator deadset at 100 psi with an internal relief of approximately 145 psi
- I The regulated actuator assembly shall contain a regulated actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover The enclosure shall contain knockouts to permit installation of expellant gas line
- J The tank/bracket assembly shall contain a welded steel bracket and agent tank The bracket shall be provided to mount the agent tank in a minimum amount of space The tank shall be secured with hinged brackets.
- K Each discharge nozzle shall be tested and listed with the system for specific applications The nozzle tip shall be chrome-plated brass, and stamped with the part number and flow rating The nozzle tip retainer and body shall be chrome plated brass The nozzle strainer shall be brass with stainless 50 mesh screen
- L Each nozzle tip shall be covered by a stainless steel protective blow-off cap
- M The regulated release mechanism shall be compatible with a fusible link detection system
- N The fusible link shall be selected and installed according to the operating temperature in the ventilation system
- O A detector bracket/linkage assembly shall support the fusible link. The detector bracket shall be 16-gauge cold-rolled stainless steel
- P The detector linkage shall be aluminum.
- Q The detector bracket/linkage assembly shall have provisions for connecting 1/2" rigid or EMT thin-wall conduit, and 1/16" diameter flexible stainless steel rope. Changes in direction of the conduit and steel rope shall be accomplished with die cast aluminum alloy, 90 degree pulley elbows
- R All exposed conduits are to be chrome plated
- S If the release mechanism is not accessible for manual actuation, a remote manual pull station(s) shall be provided as the primary means of manual actuation
- T The pull station(s) shall be the recessed type, with conduit run within the walls
- U The pull station(s) shall be the break-rod type, and shall be connected to the release mechanism trip lever by means of a 1/16" diameter stainless steel rope and 1/2" conduit (chrome plated conduit where exposed)
- V The pull station(s) shall be located at a distance not more than 125 feet from the release mechanism
- W The mounting height and location of the pull station shall be in accordance with the authority having jurisdiction
- X A UL listed, electric snap-action switch shall be provided to shut off electrical power to appliances or to activate electrically operated devices. The switch shall allow for connection to the building alarm system A relay must be supplied if the equipment load exceeds the rated capacity of the switch
- Y This system shall conform to all local, state and national codes having jurisdiction in this location
- Z The installer shall provide one-year service and inspection free of additional charge
- AA Pull stations for the fire suppression system are required to have color and numerical coded signs that correspond with the hood they service. Sign shall be engraved type with foam adhesive backing. Minimum size shall be no less than 2" x 5".

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Corresponding signs shall be placed at pull stations and on the hoods they service. Signs shall comply with any requirements set forth by the local and state authorities having jurisdiction.

BB - Provide stamped engineered shop drawings if required by the local authority having jurisdiction.

ITEM 90. UNDERCOUNTER PASS-THRU HEATED CABINET by ALTO SHAAM (Two Required)

These undercounter pass-thru heated cabinets are to be model # 750-S provided with solid stainless steel doors. These cabinets are to be provided with the following features and accessories:

- A Stainless steel interior
- B 20 gauge stainless steel exterior and door
- C Solid state controls with on/off switch; up and down arrow keys with temperature range of 60° to 200°
- D Heat indicator light; temperature display key and digital display
- E Provide with three (3) chrome plated racks
- F Eleven (11) pan positions spaced at 1-3/8" centers
- G Set of 2-1/2" swivel casters, two (2) with brakes
- H Pass through design
- I One door hinged left and one door hinged right
- J Doors equipped with locks
- K External drip trays

ITEM 91. SPARE NUMBER

ITEM 92. SPARE NUMBER

ITEM 93. SNEEZE GUARD WITH HEATLAMP AND LIGHTS by ENGLISH or BRASS SMITH

This sneeze guard with lights and heatlamps is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Heatlamp with lights in location as indicated on custom fabrication details
- G Heatlamp and light housings to include same finish as posts
- H Lights to operate independent of heatlamps

ITEM 94. PROTECTOR GUARD by ENGLISH MFG. or BRASS SMITH

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This protector guard is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This protector guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application

ITEM 95. TWO-WELL REFRIGERATED COLD PAN by DELFIELD (Two Required)

These refrigerated cold pans are to be model # N8131-FAP and are to be provided with the following features and accessories:

- A Top to be 20 gauges stainless steel
- B Interior liner to be 22 gauge stainless steel
- C Capacity of two (2) 12" x 20" 4" deep pans
- D 1/4 HP self contained refrigeration system using R290 refrigerant
- E Condensing unit mounted below cold pan in a 16 gauge steel frame
- F Sides and bottom of pan to be wrapped with refrigeration lines and to be insulated with high density closed cell polyurethane
- G Condensing unit to have 22 gauge galvanized steel housing
- H Adjustable temperature control with On/Off switch
- I Black air deflectors to guide airscreen over flush mounted pans
- J One (1) year parts and labor, five (5) year compressor warranty
- K Remote extended on/off switch

ITEM 96. COUNTER TOP BAKERY DISPLAY by STRUCTURAL CONCEPTS (Two Required)

These counter top bakery displays are to be model # CSC3223 and are to be provided with the following features and accessories:

- A 6' straight blade cord
- B Black interior and trim
- C End glass panels
- D Glass swinging front doors
- E Capacity of four (4) 18" x 26" trays
- F LED side lights with switch in base
- G 6" high solid base w/bag area, color as specified by architect
- H Mirror back panel
- I One (1) year parts and labor

ITEM 97. MOBILE CUP DISPENSER by PIPER (Six Required)

These mobile dish racks are to be model # AC-ST-2020-14OZ and are to be provided with the following features and accessories:

- A Constructed entirely of stainless steel
- B Capacity up to 425 plastic tumblers

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- C Mounted on 4" diameter polyurethane casters, two locking
- D Provide with corner bumpers
- E 36" Overall height
- F One year parts and labor warranty.
- G Custom exterior finish as selected by architect

ITEM 98. COFFEE BRWER by FETCO (Three Required) with WATER FILTER by SHURFLO (Three Required)

These Fetco coffee brewers are to be model # E214171 and are to be provided with the following features and accessories:

- A Capable of brewing up to 410 twelve ounce cups per hour
- B Automatic water fill
- C Stainless steel exterior construction
- D Dual 1.5 kw heating elements
- E Provide with two (2) model # B001280B1 16" x 6" stainless steel brew baskets
- F Provide with four (4) model # D448 portable thermal dispensers
- G Integrated hot water dispensing faucet
- H Programmable recipes
- I Touch screen display

These Shurflo water filters are to be a model # LVPO F1 kit # 94-751

ITEM 99. SPARE NUMBER

ITEM 100. SNEEZE GUARD WITH LIGHTS by ENGLISH MFG. or BRASS SMITH

This sneeze guard with lights is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Lights in location as indicated on custom fabrication details
- G Light housings to include same finish as posts

ITEM 101. COUNTER TOP REFRIGERATOR by TRUE

This counter top refrigerator is to be model # GDM-06-34-HC-TSL01. The door is to be hinged left. This unit is to be provided with the following features and accessories:

- A Self-contained 1/10-HP refrigeration system utilizing R290 refrigerant
- B Maintains cabinet temperatures of 33°F to 38°F
- C Exterior cabinet black powder coated rolled steel
- D Entire cabinet structure are foamed-in-place using high density polyurethane
- E Interior cabinet, NSF approved white aluminum liner with aluminum floor

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- F Positive seal self-closing door
- G LED interior lighting
- H Equipped with cord and plug assembly
- I Three (3) adjustable, heavy duty PVC coated wire shelves
- J 3 year parts and labor, five year compressor warranty
- K Custom backlit signage as selected by Architect

ITEM 102. FIVE-WELL REFRIGERATED COLD PAN by DELFIELD

This refrigerated cold pan is to be model # N8169-FAP and is to be provided with the following features and accessories:

- A Top to be 20 gauges stainless steel
- B Interior liner to be 22 gauge stainless steel
- C Capacity of five (5) 12" x 20" 4" deep pans
- D 1/2 HP self contained refrigeration system using R290 refrigerant
- E Condensing unit mounted below cold pan in a 16 gauge steel frame
- F Sides and bottom of pan to be wrapped with refrigeration lines and to be insulated with high density closed cell polyurethane
- G Condensing unit to have 22 gauge galvanized steel housing
- H Adjustable temperature control with On/Off switch
- I Black air deflectors to guide airscreen over flush mounted pans
- J One (1) year parts and labor, five (5) year compressor warranty
- K Remote extended on/off switch

ITEM 103. SNEEZE GUARD WITH LIGHTS by ENGLISH MFG. or BRASS SMITH

This sneeze guard with lights is to be the size and shape as shown on the food service equipment plan and constructed as per the detailed fabrication drawings. This sneeze guard is to include the following features and accessories:

- A Special length fixed mounted on countertop
- B Custom powder coat finish as selected by Architect
- C All glass to be 3/8" tempered
- D All glass panels to be adjustable
- E To meet all federal, state, and local codes applicable to this application
- F Lights in location as indicated on custom fabrication details
- G Light housings to include same finish as posts

ITEM 104. UNDERCOUNTER MOUNT INDUCTION WARMER by COOKTEK (Four Required)

These undercounter mount induction warmers are to be model # B651-U2 provided with the following features and accessories:

- A 650 watt max heat seating
- B Under countertop mounting design
- C Constructed of an aluminum housing and polycarbonate top
- D Compatible with quartz tops from 3/4" to 1-1/4" thick
- E Control panel mounted in counter base

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- F Temperature selection via control panel or pre-programmed trivet
- G Automatic pan detection
- H Maximum temperature limit protection
- I Lock feature
- J Digital LED control panel display
- K- Three year warranty
- L Provide each unit with a total of two (2) model # INC-3000 induction trivets
- M Provide each unit with a total of two (2) model # 301311 induction pan with hinged glass lid

ITEM 105. ICE AND WATER DISPENSER by SCOTSMAN or MANITOWOC with WATER FILTER by EVERPURE

This Scotsman ice and water dispenser is to be model # HID540A-1 and is to be provided with the following features and accessories:

- A 365 lbs. of ice production in 24 hours with 70° water temperature
- B 40 lbs. of ice storage capacity
- C Stainless steel exterior finish with black accent trim
- D Automatic bin level control
- E To utilize R-134A refrigerant
- F Water and ice selection to be touch-free
- G Printed circuit board and diagnostics
- H Dispenses Nugget ice
- I Agion anti-microbial protection on all contact surfaces
- J Warranty to be 3 year parts and labor on all components, 5 year parts on the compressor
- K Provide with drip tray drain kit with 4" legs

This Everpure water filter is to be model # EV9324-01 Insurice Single

ITEM 106. TWO SECTION HEATED CABINET by VICTORY or TRAULSEN

This two section heated cabinet is to be a model # HSA-2D-1 provided with a full size doors. The left door is to be hinged left and right door to be hinged right. This heated cabinet is to have the following features and accessories:

- A Electronic controls that include on/off switch, interior light switch, temperature indicator, hi/lo audio/visual alarms, power supply interrupt alarm, and door ajar alarm
- B 46.5 cubic foot net capacity
- C 3000 watt heating system
- D Cabinet exterior to be stainless steel
- E Cabinet interior to be anodized aluminum
- F Door liner to be stainless steel
- G Foamed-in-place polyurethane insulation throughout
- H Digital thermometer with battery back-up
- I Humidity vents manually operated
- J Lifetime safety grip handles

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- K Lifetime heavy duty cam lift hinges
- L Door to be self-closing and to include safety stops
- M Flush mounted automatic interior lighting
- N Heavy duty cylinder door locks
- O One piece self adjusting magnetic door gaskets
- P LED interior lighting
- Q Interior of cabinet to be equipped with universal pan slides on 3" centers
- R 3 year parts and labor warranty
- S Entire unit mounted on 6" overall height casters, front casters locking

ITEM 107. DAY SHELVING by METRO (One Section Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

Each new shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Four (4) model # 2160K3 shelves
- B Four (4) model # 74UPK3 posts
- C Two (2) model # 5MP 5" non-marking polyurethane swivel casters
- D Two (2) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 108. PASS-THRU HEATED CABINET by ALTO SHAAM

This pass-thru heated cabinet is to be model # 1200-UP provided with a solid stainless steel doors. These cabinets are to be provided with the following features and accessories:

- A Stainless steel interior
- B 20 gauge stainless steel exterior and door
- C Solid state controls with on/off switch; up and down arrow keys with temperature range of 60° to 200° to control the two independent compartments
- D Heat indicator light; temperature display key and digital display
- E Provide with four (4) chrome plated racks per compartment
- F Sixteen (16) shelf positions spaced at 1-3/4" centers
- G Set of 5" swivel casters, two (2) with brakes
- H Provide with standard door hinging
- I Pass through design
- J provide with push/pull handle kit
- K Equipped with cord and plug assembly

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ITEM 109. THREE BOWL POT & PAN SINK by CUSTOM FABRICATOR with FAUCET by T&S (Two Required)

This Custom Fabricated three bowl pot & pan sink is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

These T&S faucets are to be a model # B-0230 series and is to be provided with the following features and accessories:

- A Splash mounted mixing faucet on 8" centers
- B Swivel base faucet
- C Lever handles
- D 18" swivel nozzle
- E Two (2) supply nipples # B-0425
- F Two (2) short elbows # 006895-20

ITEM 110. 4-TIER SOILED SHELVING by METRO (One Section Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

Each new shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Four (4) model # 2148K3 shelves
- B Four (4) model # 74UPK3 posts
- C Two (2) model # 5MP 5" non-marking polyurethane swivel casters
- D Two (2) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 111. 4-TIER CLEAN SHELVING by METRO (One Section Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

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Each new shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Four (4) model # 2154K3 shelves
- B Four (4) model # 74UPK3 posts
- C Two (2) model # 5MP 5" non-marking polyurethane swivel casters
- D Two (2) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 112. 4-TIER CLEAN DISH SHELVING by METRO (Seven Section Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

Each new shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Sixteen (16) model # 2142K3 shelves
- B Four (4) model # 2148K3 shelves
- C Eight (8) model # 2154K3 shelves
- D Twenty-eight (28) model # 74UPK3 posts
- E Fourteen (14) model # 5MP 5" non-marking polyurethane swivel casters
- F Fourteen (14) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 113. CLEAN DISH DOLLY by METRO

This poker chip clean dish dolly is to be a model # PCD11A and are to be provided with the following features:

- A Constructed of high density polymer with a rigid polyurethane foam core
- B Seamless, molded polymer construction
- C Hand grips on all four sides
- D Four (4) swivel caster, two (2) with brakes
- E Six-mil vinyl cover
- F Four (4) dividers, and center column provide with each dolly

ITEMS 114-120. SPARE NUMBERS

ITEM 121. 2-COMPARTMENT WALK-IN COOLER – EXISTING/MODIFY

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Food service equipment contract to convert freezer section of this existing walk-in to a cooler. Refrigeration components and scope of work are specified as part of Item 128 of this specifications section. The existing walk-in freezer door interior to the unit is to be removed with all existing hinge and lock penetrations capped with stainless steel plugs or fasteners.

ITEM 122. COUNTER WITH SINK by CUSTOM FABRICATOR with FAUCET by T&S

This Custom Fabricated counter with sink is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

This T & S faucet is to be model # B-0221 and are to be provided with the following features and accessories:

- A Swivel base faucet
- B Deck mount mixing faucet on 8" centers
- C Lever handles
- D 12" swivel nozzle
- E B-0199-01F-10 aerator

ITEM 123. THREE TIER CART by EAGLE, LAKESIDE, or PIPER (Three Required)

These three tier carts are to be model # UC-411 and are to be provided with the following features and accessories:

- A Three stainless steel shelves welded to angle legs
- B Stainless steel caster frame
- C Standard 1"-high upturn on ends and rear of top and center shelves
- D Four 4"-diameter swivel plate casters
- E 1"-diameter stainless steel handle at one end

ITEM 124. RED SOILED SHELVING by METRO (One Section Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

Each new shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Four (4) model # 2148K3 shelves
- B Four (4) model # CSM6-R red shelve marker
- C Four (4) model # 74UPK3 posts

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- D Two (2) model # 5MP 5" non-marking polyurethane swivel casters
- E Two (2) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 125. GREEN CLEAN SHELVING by METRO (Two Section Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

Each new shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Eight (8) model # 2148K3 shelves
- B Eight (8) model # CSM6-G green shelve marker
- C Eight (8) model # 74UPK3 posts
- D Four (4) model # 5MP 5" non-marking polyurethane swivel casters
- E Four (4) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 126. TWO BOWL PREPARATION SINK by CUSTOM FABRICATOR with FAUCET by T&S

This Custom Fabricated two bowl preparation sink is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

This T&S faucet is to be a model # B-0231 series and is to be provided with the following features and accessories:

- A Splash mounted mixing faucet on 8" centers
- B Swivel base faucet
- C Lever handles
- D 12" swivel nozzle
- E Two (2) supply nipples # B-0425
- F Two (2) short elbows # 006895-20

ITEM 127. ONE COMPARTMENT WALK-IN FREEZER by TAFCO or AMERICAN PANEL

This one compartment walk-in cooler is to be the size and shape as shown on drawing FS1.1. Manufacturers' standard (actual) sizes and door locations are not acceptable unless they conform to the equipment plan. The height is to be 8'-6". It is to be constructed as one common unit. The entire unit will be built set on the building finished floor and utilize a 4" thick insulated floor. This walk-in is to include the following features and accessories:

A - Constructed of modular panels

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- B Construction to be in strict compliance with NSF standard number 7 and in accordance to section 312 of the US Energy Bill H.R.6
- C Panels are to consist of interior and exterior metal surfaces precision roll formed to exact dimensions with double 90° edges. The finished metal surfaces are to be fitted with a tear drop profile gasket and placed in precision tooled fixtures where they are to be injected with foamed-in place urethane insulation.
- D Curing of the insulating core is to take place at a controlled temperature to provide permanent adhesion to the metal surfaces, to allow uniform foam expansion and to maximize finished panel strength
- E Panel edges to have molded urethane tongue and groove profile to accurately align panels during installation and to provide an air tight seal
- F All light fixtures to be vapor proof globe style fixtures equipped with LED bulbs
- G Panels to be 4" thick
- H Floor panels to have an NSF approved cove between the floor and walls
- I Floor panels are to be plywood reinforced constructed as "super floor" and are to be capable of supporting evenly distributed loads of 5,000 lbs. per square foot
- J Doors are to be flush mount, magnetic infitting type with door opening of 36" wide x 78" high
- K Perimeter of the doors and frames shall be built of fiberglass reinforced plastic (FRP) and shall house a door frame heater circuit, flexible bellows type vinyl door gasket with magnetic core, a magnet attracting stainless steel trim strip and flexible vinyl door sweep
- L Door frames to be provided with a vapor proof light fixture centered above the door with globe pre-wired to a rocker type light switch with pilot light, digital thermometer, variable slide rheostat for heater wire control and a 14 gauge galvanized steel threshold plate
- M Door hardware to be die cast zinc with brushed satin finish
- N Doors to be mounted with three (3) heavy-duty cam lift hinges per door
- O Door pull handles to incorporate a keyed cylinder lock, provision for a separate padlock and Kason # 27C 1/4 turn inside safety release handle to prevent personnel entrapment
- P Doors to include a hydraulic closer device for positive door closing
- Q All doors to include strip curtains
- R Cooler doors to have insulation of at least R-25 and freezer doors to have insulation of at least R-32
- S Finishes are to be as follows:
 - 1 Unexposed exterior walls to be .032" mill finished stucco embossed aluminum
 - 2 Exposed exterior walls to be 22 gauge stucco embossed stainless steel
 - 3 Interior walls to be .032" mill finished stucco embossed aluminum
 - 4 Interior ceilings to be .032" mill finished stucco embossed aluminum, painted white
 - 5 Interior floor to be 1/8" aluminum diamond tread plate floor surface Grind off aluminum bumps at seams between floors panels so that adjoining floor panels can be pulled and sealed tight to each other
 - 6 Exterior floor to be 26 gauge stucco embossed galvalume
 - 7 Exterior ceiling to be 26 gauge stucco embossed galvalume

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- 8 Exposed exterior ceiling to match exposed exterior wall finish
- 9 Interior/exterior doors and door frames to be have 36" high 1/8" diamond tread aluminum kick plate, installed flush with remaining finish remainder of door and frame to be 18 gauge stainless steel and to include a 14" x 14" heated view window in each door
- T Insulation to be 4" thick high pressure impingement mixed, foamed-in-place urethane, minimum 2.2 lb. per cubic foot density, fully heated cured and bonded to metal finishes
- U Minimum R-value for cooler walls, ceilings, and doors is to be R-25
- V Minimum R-value for freezer walls, ceilings, and doors is to be R-32
- W Minimum R-value for freezer floors is to be R-28
- X The insulation shall have a 97% closed cell structure
- Y Assembly of the walk-in is to be accomplished by the use of cam-locking mechanisms
- Z Cam lock spacing on vertical joints shall not exceed 46", or 23" from the junction of vertical and horizontal joints
- AA Cam locks to be foamed-in-place and anchored securely in the panel by steel wings integral to the lock housing
- BB Cam locks to be operated through access ports by the use of a hex wrench
- CC Access ports are to be on the walk-in interior and are to be covered by vinyl snap-in caps after final assembly
- DD Provide and install the following extra light fixtures:
 - 1 Freezer to include two (2) additional light fixtures
- EE Heated vent port for the freezer
- FF Provide and install matching stainless steel closure panels between walk-in walls and building walls Closure panels to be constructed of the same material as the exposed exterior walk-in walls
- GG Provide and install matching stainless steel closure panels from face of walk-in to a height of 1" above finished ceiling Closure panels to be constructed of the same material as the exposed exterior walk-in walls
- HH Provide and install bumper rail on exposed walk-in surfaces bumper rail to have black rubber bumper insert installed in extruded aluminum channel fastened at 10" and 34" above finished floor
- II Provide with diamond treadplate interior ramp with NSF cove

ITEM 128. REFRIGERATION RACK SYSTEM by COLDZONE or COOLTECH

This refrigeration system is to be a pre-engineered and factory assembled unit, trade name "MINI-PAK" air-cooled outdoor refrigeration system. This rack system is to be located outdoors in a location as directed by the architect with a total refrigeration line run not to exceed 150' total with a 35' maximum vertical rise. Location to verified with architect.

This unit is to be an air-cooled model # MPL-2CZ provided with the following features and accessories:

The system shall be housed in a single, compact rustproof cabinet. The unit shall utilize multi-circuited air-cooled condensers for the walk-in coolers and freezer. The frame and base shall be comprised of 16 and 10-gauge all welded sheet steel, respectively. Hot-air

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discharge from the condenser fans shall be vertical. A venturi-contoured air-scoop shall be provided for each fan to reduce air turbulence and fan loading.

Fan blades shall be covered with a plastic coated fan guard. The unit shall be provided with single stage, semi-hermetic Copeland compressors, with individual air-cooled condensers operating within the recommended range of suction and discharge pressures.

Each condensing system shall be equipped with a new Copeland semi-hermetic compressor, dual pressure controls, suction-line vibration eliminator, and oversized receiver -- all of which shall be factory assembled.

Each condensing unit shall be equipped with a properly sized receiver with pump-down capacity large enough to accept the total liquid volume of refrigerant for all systems without exceeding 80% of its volumetric capacity. Each receiver shall be equipped with "king and queen" valves with service ports.

All compressor units shall be new factory assembled to operate with the refrigerant as noted above.

ELECTRICAL CONTROL PANEL

The refrigeration system shall have a factory-mounted and pre-wired (NEMA 3 EQV.) electrical control panel complete with industrial grade interlocked main-fused disconnect with separate compressor and fan motor circuit breakers, contactors and defrost time clocks for single point power connection. A photo etched wiring diagram made up of a .012 aluminum plate shall be permanently affixed inside the control panel.

PRE-PIPING

All refrigerant lines shall be type "L" tubing and extended to one side of the package in a neat and orderly manner with ends of lines capped and identified by system using photoetched tags. All tubing shall be securely supported and anchored with uni-strut clamps. Suction lines shall be wrapped and insulated to prevent condensate accumulation. All piping shall be pressure-tested at the factory with nitrogen at 150 psi for low side and 400 psi for high side.

EVAPORATOR COILS

The evaporator coils shall include a compressor BTU matched low-profile end mount coil, thermostat, thermal expansion valve and liquid-line solenoid valve shipped loose.

INCLUSIONS

This system shall include but not be limited to the following components:

- A 3.0 H.P. low temperature refrigeration system for the walk-in freezer with model # ZF09K4E compressor and model # CL6E077DDARE evaporator coil operating at 10°
- B 1.0 H.P. medium temperature refrigeration system for the existing walk-in cooler with model # ZB07KAE compressor and model # CL6A073ADAREevaporator coil operating at 35°

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- C 1.2 H.P. medium temperature refrigeration system for the existing walk-in cooler with model # ZB08KAE compressor and model # CL6A094ADAREevaporator coil operating at 35°
- D Two (2) 3/4 H.P. condenser fan motors
- E R-448A refrigerant to be used on all units
- F Coils to be supplied with Econet adaptive defrost control
- G System designed to operate at 95 degree ambient temperature
- H Evaporators to be provided with high efficiency EC motors
- I All compressors to include crankcase heater and head pressure control
- J All evaporator coils to include matching thermostats, solenoid valves, and expansion valves
- K System to include main fused disconnect switch factory installed

REFRIGERATION INSTALLATION

Obtain all permits required for this installation, mount evaporator coils, provide and install refrigerant piping, fittings, hangers, support, hook-up and start-up as per manufacturers preparation and start-up procedures.

All copper tubing shall be refrigerant grade type "L". Sil-fos 15 shall be used, not soft solder. Insulate refrigerant piping as required with armaflex insulation. After the system and unit cooler have been connected, the balance of the system shall be leak-tested with all valves open.

The complete system shall be evacuated with a vacuum pump. Each system shall be charged with the refrigerant as specified by the manufacturer. Test and adjust each condensing unit to make the system operational.

Provide type "L" copper drain lines for walk-in refrigerators and freezers, pitched 1/4" per foot of run. Drain to be "P" trapped outside of refrigerated space to avoid entrance of warm, moist air or vermin. Provide drain line heater wrapped around the drain line for each unit cooler inside the freezer compartment. This drain line heater is to be insulated with Armaflex.

Refrigeration contractor will be responsible for removing and disposing of the existing refrigeration lines, coils, and compressor system that is currently servicing the existing two compartment walk-in cooler/freezer that is being converted to a two section walk-in cooler.

System installation to be performed by ColdZone factory authorized installer. Proof of authorization must be submitted with the manufacturer's shop drawing

ITEM 129. DRY STORAGE SHELVING by METRO or EAGLE (Four Sections Required)

This dry storage shelving is to consist of a combination of three mobile four tier shelving units and nine mobile top-track high density shelving units as described below:

The "Top-Track" High Density storage system with "Super Erecta Shelf Design" with Metroseal 3 finish is to include the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer

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- C Epoxy coating with Microban antimicrobial product protection,
- D Plastic split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

This seven foot section of Super Erecta & Super Adjustable Top-Track system shelving is to consist of the following components:

- A Two (2) model # TTE21K3 Stationary End Unit Kit
- B Two (2) model # TTM21K3 Mobile Unit Kits
- C One (1) model # TTS7NA Track Set, 7 feet long
- D Sixteen (16) model # 2160NK3 shelves
- E Eight (8) model # 9993S Stainless Steel Foot Plates for stationary end units
- F All shelving mounted to 86" tall Metroseal 3 posts

ITEM 130. DRY STORAGE SHELVING by METRO (One Section Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

Each new shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Four (4) model # 2154K3 shelves
- B Four (4) model # 74UPK3 posts
- C Two (2) model # 5MP 5" non-marking polyurethane swivel casters
- D Two (2) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 131. ONE SECTION REFRIGERATOR by VICTORY or TRAULSEN

This one section refrigerator is to be model #RSA-1D-S1-HC provided with full size door. The door is to be hinged right. This refrigerator is to have the following features and accessories:

- A Electronic controls that include on/off switch, interior light switch, temperature indicator, hi/lo audio/visual alarms, power supply interrupt alarm, door ajar alarm, and clean condenser alarm.
- B Top mounted self-contained 1/3 HP refrigeration system
- C To utilize R-134a refrigerant
- D Plasticized evaporator fin coils

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- E Non-electric condensate evaporator
- F Foamed in place polyurethane insulation
- G Heavy duty cylinder locks
- H Life time guaranteed door handles
- I Stainless steel exterior and aluminum interior
- J Self closing doors with 120° hold open feature
- K Cam lift door hinges guaranteed for life
- L Proximity door switch for interior light control
- M One piece magnetic snap in door gaskets
- N Anti-condensate door perimeter heaters
- O Glass door with stainless steel frame
- P Thermal breaker caps guaranteed for life
- Q Four (4) epoxy coated wire shelves per compartment
- R 21.5 cubic foot net capacity
- S Cord and plug
- T LED interior lighting
- U Set of 6" overall height casters
- V Three (3) year parts and labor warranty with five (5) year compressor warranty

ITEM 132. SPARE NUMBER

ITEM 133. WORK COUNTER by CUSTOM FABRICATOR

This work counter is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

ITEM 134. FREEZER SHELVING by METRO (Five Section Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

- A 12-year limited warranty against rust formation
- B Self-sealing hydrated chromate base layer
- C Epoxy coating with microban
- D Provide split sleeves
- E Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
- F Shelves adjustable in 1" increments

Each new shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

- A Four (4) model # 1842K3 shelves
- B Eight (8) model # 1854K3 shelves
- C Eight (8) model # 1860K3 shelves
- D Twenty (20) model # 63UPK3 posts
- E Ten (10) model # 5MP 5" non-marking polyurethane swivel casters
- F Ten (10) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

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ITEM 135. POINT OF SALES STATION – OWNER PROVIDED (Two Required)

ITEM 136. SPARE NUMBER

ITEM 137. DROP-IN HAND SINK by ADVANCE or EAGLE with FAUCET by T&S

This Advance drop-in hand sink is to be model # DI-1-10SP and is to be provided with the following features and accessories:

- A One (1) deep drawn 110" x 14" x 10" deep sink bowl
- B Heavy gauge type 304 stainless steel coved bowls
- C Constructed of 20 gauge stainless steel
- D 1-1/2" NPS crumb cup strainer
- E Sound deadened bowl
- F $\;\;$ Provide with undercounter mount brackets for installation into 3cm quartz top $\;$ Verify top thickness with architect

This T&S faucet is to be model # EC-3100-HG and are to be provided with the following features and accessories:

- A Single rigid gooseneck spout
- B 11" tall and 4" long spout
- C Electronic eye automatic operation
- D Water resistant control module box
- E Provide with transformer for 120 volt operation
- F To include hydro-generator
- G Temperature mixing valve with integral check valves
- H Furnished with two 18" long flexible stainless braided water supply lines

END OF SECTION 11 40 00