SECTION 11 40 00
FOOD EQUIPMENT

PART 1 GENERAL

1.1 SUMMARY

A. Supply, deliver and set in place all food service equipment at locations indicated and level before and after final connections by others.

B. Related Sections:

A. General and Supplementary conditions and all drawings and specifications associated with the contract documents.

1.2 REFERENCES

A. All Food Service Equipment provided and installed must comply with below agencies, state department of health and county or local laws and ordinance.

B. American Society for Testing Materials (ASTM):

a) ASTM A167, Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip.
b) ASTM A446, Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Structural (Physical) Quality.
c) ASTM C1036, Specification for Flat Glass.
d) ASTM C1048, Specification for Heat Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass.

C. American Welding Society (AWS).

D. National Electrical Manufacturers Association (NEMA).

E. National Fire Protection Association (NFPA 96).

F. National Sanitation Foundation (NSF).

G. Underwriters Laboratories Listing (UL).

1.3 SUBMITTALS

A. The Contractor shall submit eight (8) sets of submittals for the Consultant’s review and approval such as assembly drawings, electrical and mechanical rough-in connection plans, details for plumbing, electrical, air conditioning and ventilation services for all kitchen equipment and brochures, catalog cut-sheets, specifications and operating characteristics for buy-out equipment. This submittal set

shall be submitted within 45 days of notification of bid award. Clearly indicate any deviations from contract Documents, such as arrangement of piping, connections, wiring method of fabrication, manner of structural conditions, standard shop practices, or other reasons, as noted in letter of transmittal accompanying submittals.

B. Drawing of fabricated equipment shall not be less than ¾" equal one foot scale.

C. Rough-in drawings shall not be less than ¼" equal one foot scale. Shop Drawings: Required 45 days after award of contract

D. Product Data: Provide data on appliances; indicate configuration, sizes, materials, finishes, locations, utility connections and locations.

E. Samples: Submit samples of stainless steel and other finish materials for color selection.

F. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

G. Manufacturer's Certificate: Certify that exhaust system and tests meet or exceed specified requirements.

1.4 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data:
1. Operation Data: Provide manuals with a sequence of operation and utility connection diagram explaining system operation and corresponding to actual devices. After approval, submit 2 sets of three ring binders.

2. Maintenance Data: Provide lubrication and periodic maintenance requirement schedules.

1.5 QUALITY ASSURANCE

A. Regulatory Requirements:
1. Conform to applicable State and local codes for utility requirements.

2. Products Requiring Electrical Connection: Listed and classified by Underwriters' Laboratories, Inc. as suitable for the purpose specified and indicated.

B. Energy Ratings: Provide appliances with energy guide labels with energy cost analysis (annual operating costs) and efficiency information as required by Federal Trade Commission.

1. Provide all appliances that are Energy Star Rated.

1.6 QUALIFICATIONS

A. Installer: Must have a minimum of 5 years documented installation experience with projects similar to this project.

B. Fabricator: Must specialize in manufacture of commercial food services equipment with minimum 5 years documented experience.

C. Manufacture: Must specialize in manufacturing products specified in this section with a minimum of 5 years documented equipment manufacturing experience.

1.7 DELIVERY, STORAGE and HANDLING

A. Store products clear of floor in a manner to prevent damage.

B. Coordinate size of access and route to place of equipment installation.

C. Coordinate equipment deliver and installation with all other trades.

D. This contractor takes all responsibility for equipment damage incurred before, during and after installation, until substantial completion has been issued.

1.8 COORDINATION

A. Coordinate existing equipment with owner per Part 3 Existing Equipment.

B. Coordinate with other trades to ensure existing equipment is disconnected prior to removal by this contractor. Supplying and installing all necessary drain traps, steam traps, vents, shut-offs, valves, pipe fittings, and/or other materials to complete final plumbing and electrical or steam connections between the rough-in and the connection or connections on each piece of equipment.

C. Ductwork and ductwork connections from hoods unless otherwise indicated.

D. Installing all drain fittings, tailpieces, faucets, operating switches, and/or starters.

E. Coordinate sequencing of equipment installation with other trades prior to installing any piece of equipment.

F. Coordinate special conditions with other trades, i.e. floor depression, soda line conduit requirements, roof curbs, control wiring, etc…

1.9 WARRANTY

A. Provide a one (1) year parts and labor guarantee on all new equipment and a 5 year parts guarantee on refrigeration components.

B. Components of equipment subject to replacement prior to one year's use and those items which may fail due to improper or inadequate periodic maintenance by the Owner/Operator are not intended to be included within the scope of warranty.

C. For all commercially manufactured equipment that has refrigeration systems and semi-hermetic compressors, furnish an additional four (4) year warranty on all compressors.

D. Guarantee Warranty period shall commence with the date of substantial completion.

E. Warranty includes all costs incurred for removal and re-installation of the replacement component or equipment.

PART 2 PRODUCTS

2.1 MATERIALS

A. Sheet Steel: ASTM A446; 1.25 ounce per square foot galvanized coating.

B. Stainless Steel: ASTM A167; Type 304 commercial grade, No. 4 finish.

C. Glass: 3/16 inch float conforming to ASTM C1036 and ASTM C1048; exposed edges ground; cut or drilled to receive hardware.

D. Plastic Laminate: NEMA LD3; 0.050 inch thick; color as selected by Owner.

E. Laminate Backing Sheets: LD3-BK20, 0.020 inch thick, unfinished plastic laminate.

F. Finish Hardware: Manufacturer's standard.

G. Work Surfaces: As specified.

H. Fittings: Sink drains with crumb cup and waste fittings, faucets, and electrical outlets.

I. Service Outlet Covers and Escutcheons: Stainless steel.

J. Service Accessories and Connections:

1. Provide control switch or starter on each motor-driven appliance or heating element, under provisions of UL requirements.
2. Provide internal wiring for equipment, including electrical devices, wiring controls, and switches to a common junction box.
3. Provide suitable length of 4 wire cord with plugs to match building receptacles.
4. Provide lamps for fixtures in equipment.
5. Provide equipment with connection terminals, so that connections of plumbing, gas, steam, electrical, ventilation, and refrigeration services can be made. Where receptacles are specified for custom equipment, supply cut-outs and outlet boxes set in place accessible for connections of electrical work.

2.2 EQUIPMENT

A. Provide rough-in hardware, supports and connections, attachment devices, closure panels, trim strips, and all accessories required for proper operation of equipment.

B. Standard of Comparison: The specified equipment has been established to set a standard of quality and features.

C. Refer to Division 1 – General and Supplemental conditions for substitution requirements.

D. If substitutions require different utility/building conditions, electrical, plumbing, ventilation, etc., from those specified, a complete list of those changes for each item shall be included with the request for substitution, prior to submitting a bid. Any costs associated with these changes will become the responsibility of this Contractor.

E. Verify direction of door swings.

2.3 FABRICATION

A. General Requirements:

1. Stainless Steel Fastenings and Fittings: Bolts and screws with countersunk flat heads at interior and exterior visible or accessible surfaces. Use concealed fastenings where possible
2. Form edges smooth. Fabricate sheet material for work surfaces, facings, shelves, and drainboards of straight length in 1 continuous sheet when not over 12 feet in length.
3. Fix leg-mounted units by dowelling to floor with 1/4 inch stainless steel pins, where vibration or oscillation is anticipated.
4. Provide legs of with stainless steel adjustable feet. Fasten legs to equipment securely and rigidly.

5. Install rubber or nylon button feet or other protective device on bearing surface of any item positioned on a finished surface.
6. Isolate rotating or reciprocating machinery to prevent noise and vibration.
7. Provide accommodation for installation of final connections by other trades and accessibility to components such as compressors, junction boxes, etc…
8. Grind welds of stainless steel smooth and flush; polish to match adjacent surfaces.
9. Cut and drill components for service outlets and fixtures.
10. Provide access panels where required to access utilities.
11. Shop assembles work where possible.

B. Load Carrying Counter Surfaces: Reinforce frame support system and surfaces so that surfaces may safely support a load of 200 pounds concentrated on 1 square foot in any area or surface with no indentation showing on surface and with permanent set not exceeding 0.005 inches.

2.4 FINISHES

A. Metal (Except Stainless Steel): Degrease and phosphate etch followed by primer and minimum 2 coats factory baked epoxy enamel, color as selected by Consultant/Architect from manufacturer’s currently available range of colors.

B. Plastic Laminate: Color as selected by Architect from manufacturer’s currently available range of colors.

C. Stainless Steel: Number 4 finish (unless indicated otherwise).

D. Bituminous Paint: Sound deaden internal surfaces of metal work and underside of metal counters and sinks.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify all existing conditions and existing equipment requirements.

B. Verify equipment is installed in accordance with the manufactures recommendations and requirement.

C. Verify ventilation outlets, service connections, and supports are correct and in required location.

D. Verify operational condition of existing equipment.

E. Report equipment discrepancies or non-operational equipment to the Consultant.

3.2 INSTALLATION

A. Use anchoring devices appropriate for equipment and expected usage.

B. Install items under provisions of manufacturers' instructions.

C. Insulate to prevent electrolysis between dissimilar metals. Provide sealant to achieve clean joint without crevices.

D. Weld and grind joints in stainless steel work tight, without open seams, where necessary due to limitations of sheet sizes or installation requirements.

E. Sequence installation and erection to ensure mechanical, plumbing and electrical connections are achieved in an orderly and expeditious manner.

F. Cut, fit, and patch where necessary. Coordinate work with other trades.

G. Cut and drill tops, backs or other elements for service outlets, fixtures, and fittings.

H. Provide access panel or cutting and patching of items of this Section required for the installation or services of equipment.

I. Remove and reinstall existing equipment required under this Section. Foodservice Equipment contractor shall verify condition of existing equipment prior to removal, if being reinstalled by this contactor or reused by owner.

J. Protect new and existing equipment during construction phase as required to prevent damage to equipment.

3.3 EXISTING EQUIPMENT

A. The owner reserves the right to keep any existing equipment, coordinate with owner on removal and transportation of equipment to a location of their choice. It shall be the responsibility of this contractor to salvage equipment the owner chooses not to retain existing equipment.

B. MEP disconnections by related trades, move, store and re-install equipment, ready for utility connection.

C. Coordinate scope of work and timeline with Owner and other trades prior to removal of existing equipment.

D. Clean and re-furbish existing equipment to be re-used to "like new" condition, as noted.

E. It is the responsibility of this contractor to provide storage as required until the piece of equipment is installed.

3.4 ADJUSTING

A. Upon completion of installation, adjust new and existing equipment and apparatus to ensure proper working order and conditions.

B. If a new piece of equipment is not functioning properly and determined to be non-repairable in the field it shall be removed and replaced with a new piece of equipment.

C. Inspect all equipment and run each piece of equipment through a complete operating cycle to verify that equipment is fully operational.

3.5 CLEANING

A. Remove masking or protective covering from stainless steel and other finished surfaces.

B. Remove all packing materials and debris from jobsite.

C. Wash and clean new and existing equipment.

D. Polish glass, plastic, hardware and accessories, fixtures and fittings.

3.6 DEMONSTRATION AND TESTING

A. Test existing and new equipment prior to demonstration.

B. At completion of work, provide qualified and trained personnel to demonstrate operation of each item of equipment and instruct Owner in operating procedures and maintenance.

C. Individuals Performing Demonstration shall be fully knowledgeable of all operating and service aspects of equipment.

D. Start-up, test, and adjust new equipment. Authorized factory technicians shall start-up equipment requiring testing and balancing, i.e. hoods, pulping systems, equipment with remote components, etc….

3.7 SCHEDULES

A. Refer to Construction Schedule for installation of Foodservice equipment.

PART 4 LISTING OF FOODSERVICE EQUIPMENT

4.1 Item 1 – Tray and Silverware Station – One (1) Required

A. Custom fabricated Tray and Silver Station, Finish: Solid surface top and tray slide with Plastic Laminate, Size: 6'-0" x 2'-6" x 2'-10" high. Description: Straight unit with raised solid surface rear shelf; 2cm solid surface top with 2" drop edge. Cut outs for utensil and condiment containers (provide stainless

steel perforated silverware cylinders for each hole), Recessed areas for trays, Standard plastic laminate exterior, Customer side: Straight with finished back, plastic laminate finish. Black vinyl toe base. Solid surface tray slide with (3) stainless runners. (Laminate color & solid surface selection by Architect).

4.2 Item 2 – Refrigerated Merchandiser – One (1) Required

A. Bandit Air Screen Display Case, 72" L x 78" H, self-contained refrigeration, lift out black louvered air grill, electronic display control, defrost termination, digital temperature display, top canopy light, (4) extra deep s/s shelves, s/s deck & perforated back panel, brushed aluminum interior ends, laminated exterior with T-mold edge, front air intake - top air discharge, electric condensate evaporator, 1-1/4 hp., 115/208-230v, 13.2 amps, NEMA L14-30P, UL, NSF 7. One (1) year parts and labor warranty with a five (5) year compressor warranty.
   1. One (1) Extra-large heavy duty electric condensate evaporator pan.
   2. One (1) Rear access doors, solid sliding.
   3. One (1) Rear interior panel & hardware, black powder coat.
   4. Four (4) Promolux lighting (low UV) upgrade per shelf.
   5. One (1) Exterior Finish: plastic laminate (selection by Architect).
   6. Four (4) Casters.
   7. One (1) Pull down Econofrost night curtain.

4.3 Item 3 - Two Door Refrigerator – One (1) Existing/Relocate

4.4 Item 4 – Fire Suppression System – One Lot (1 Lot)

A. Ansul R-102 Ansul Fire Protection System
   1. This item shall provide coverage for item 5. Furnish a complete wet chemical fire suppression system model R102 as manufactured by “Ansul” or equal in compliance with U.L. 300 standards. The system shall include factory prepipe, all permits and test as required by the authority having jurisdiction.
   2. Automatic actuation shall be by means of fusible with no visible conduit. System shall include an lectrically actuated release mechanism.
   3. System shall be furnished and installed by an Ansul certified distributor in accordance with manufacturer's instructions and the authority having jurisdiction.
   4. Microswitches shall be furnished as part of the fire protection system for tie in of building alarm and for make up air/fire/fuel shut down.
   5. All access openings, holes, sleeves, chases, etc., in building structure necessary to permit piping and control tubing to be run between system unit, ventilator and duct work are to be provided by the General Contractor.
   6. The Building Alarm System Contractor is to furnish a control relay to detect operation of the system by

connection to the microswitches supplied. The Electrical Contractor is to furnish and install all wiring required for the system specified.

7. All exposed piping and nozzles of fire protection system shall be chrome or Stainless steel sleeved.
8. All horizontal piping is to be done on the top of the ventilator unless otherwise specified.
9. Provide mechanical Gas shutoff valve, verify size with Engineer. Verify location of remote manual pull station.

4.5 Item 5 – Exhaust Hood – One (1) Required

A. Dimensions: (one section) approximately 90″ wide x 60″ deep x 24″ high with 24″ deep supply air plenum box with a typical hanging height of 6'-8" above finished floor.

B. Furnish and install a complete kitchen exhaust canopy. The canopy shall bear either the ETL or Underwriters Laboratories U.L. label, for listed range hood without exhaust fire damper per standard 710 and be fabricated in compliance with NFPA-96-2001, and shall bear the National Sanitation Foundation seal of approval. The installation shall be in accordance with the manufacturer's recommendations and conform to NFPA-96 guidelines and all applicable local codes. The size shall be as indicated on drawings and/or equipment schedule. Hood shall be provided with a stainless steel down discharge laminar flow supply plenum. Face velocity shall not exceed 130 fpm.

C. The canopy exposed areas and inner liner shall be 18-gauge stainless steel with a #4 finish. Each canopy shall have a filter housing of the same material as the canopy liner. The filter housing shall be equipped with a concealed drip tray the full length of the canopy and with a grease cup for easy removal and daily cleaning.

D. LED light fixture with the following certifications U.L., CSA, NSF and CE for use in grease exhaust hoods in quantity sufficient to provide 50 foot candles at the cooking surface when hood is mounted 84″ A.F.F. LED light fixture is complete with die cast aluminum junction box with integral fins for natural heat dissipation. Input voltage of 24V DC with a power consumption not to exceed 20 watts. The housing encases 24 LED light emitters with a brightness of 1000 lumens. Lamp body is stainless steel ring with a high temperature silicone seal. Junction box to accept standard ½″ NPT fitting. Fixture shall come complete with integral power supply with an input voltage of 108VAC – 305VAC and input frequency of 50/60 Hz. Input current rating shall be 0.57A @ 120VAC. Fixture shall contain no mercury or lead. There shall be a light and fan switch in the face of the hood.

E. The exhaust airflow will be based on the convective heat generated by the appliances underneath each canopy. Submittal

shall include convective heat calculations base on the input power of the appliance served as defined by ASTM Standards F-1704-05 Capture & Containment and F-2474-05 Heat Gain to Space. Final air volume calculations shall comply with the hood listing.

F. Hood will include an active internal system that will allow for capture and containment of thermal plume at specified air volumes. The capture jet air shall be pulled into a 1″ air plenum with a fan and discharged through ports that are located along the inside front, side and bottom edge of the hood at discharge velocity of 1800 FPM. Slot type, passive devices or “Short-Cycle” discharge is not acceptable.

G. The hood shall be equipped with model KSA multi-cyclone stainless steel grease extractors. The grease extraction efficiency is 93% on particles with a diameter of 5 microns and 98% on particles with a diameter of 15 microns or larger, based upon ASTM F-2519-05 method of test. Sound levels shall be between 40 and 55 NC.

H. The hood shall be provided with MBD manual balancing damper for ease of balancing. The damper shall be adjustable to allow for balancing airflow based on pressure differential readings from integral T.A.B. test and balance port in the hood. The damper outer casing shall be constructed of continuously welded 16 gauge galvanized steel including the balancing blades. Optional construction is of 18 gauge stainless steel. Adjustment of the parallel dampers (in open position) will be achieved by manually turning the locking adjustment bracket until the desired pressure reading is achieved. The air flows through the KSA extractors and the air chamber are to be determined through the integral T.A.B. (Testing and Balancing) ports mounted in the hood. It is the responsibility of the air balancer to adjust the exhaust volumes after installation with a Magnahelic Gauge or Shortridge Digital Anemometer and the hood TAB ports.

I. Hood shall be provided with a thermostat to determine if appliances are energized without the exhaust fan engaged and will engage the exhaust fan as required to meet the IMC interlock requirement. The hood will come standard with the accuflow indicator. The accuflow provides a visual indicator that the system is at design exhaust air values. A pressure transducer measures design exhaust rate and this is interpreted by the accuflow sensor by a steady green indicator light. Should the system be below design airflow, the indicator light will blink once in sequence. Should the indicator light blink twice in sequence, the exhaust airflow is above design.

J. Any alternate system must meet construction and performance requirements and efficiencies as outlined in this specification. Requests for approval must include grease filtration performance data (micron size vs. extraction) for

mechanical extractor and manufacturer's own exhaust airflow calculations based on convective heat load of cooking equipment beneath the hood. Efficiency comparison data to be performed in accordance with ASTM Standard F1704-96 for a 24" high canopy and include results for exhaust rate for capture and containment of convective plume, Temperature rise of exhaust air and Heat Gain to the space (kBtu/h). Make up air will be calculated so that the same amount of air will be taken from the zone as is required by the specified system. An additional load cannot be placed on the kitchen HVAC system. Manufacturer must provide a written guarantee of performance, ensuring the specifying consultant that the system will perform to the consultant's satisfaction when installed and balanced according to design airflows and results of ASTM Standard F1704-96 test. (As determined by TAB ports and pressure vs. air flow curves). Consultant reserves the right to reject any system which, when installed, does not perform to ASTM Standard F1704-96 for heat gain according to the specification. Rejected system must be replaced with specified system, with all replacement costs paid by manufacturer of rejected system. Any changes in the specified sizing of power wiring or gas lines due to the use of any system other than that which is specified is the responsibility of the alternate hood manufacturer, and must be coordinated by the hood manufacturer and contractors involved.

K. Supply and install S/S closure panels around perimiter of hood to finished ceiling (verify finished ceiling height).

L. Provide and install capture jet "L" shaped bar approximately 72" wide x 24" deep x 42" high behind item# 9. Verify site conditions and appliance location before installation. Plenum is manufactured using 300 series 18 ga. stainless steel, shall be easy to clean and incorporate an integral impeller fan with solid state speed control. Power requirement is 120/1 and draws 147 watts. The impeller fan will pressurize the capture bar plenum and create a vertical discharge capture jet air curtain. This Capture bar improves capture and containment in island applications by directing the convective plume and effluent toward the canopy and minimizes the effect of cross drafts. The capture bar should be wired to operate during hood operation. The capture air shall be introduced through a special discharge panel and be of sufficient velocities to assist the thermal plume toward the KSA grease extractors.

4.6 Item 6 – 36" Griddle – One (1) Required

A. LG Series Griddle, electric, counter unit, 36"W x 23"D x 1" highly polished steel griddle plate, Selectronic solid state control every 12", 5-1/2" high side and backsplash, grease trough, temperature range 175° - 450°F, s/s exterior, 4" s/s legs, 18.0kw, 208v/60/3-ph, 50.0 amps. One (1) yr. parts & labor warranty.

4.7 Item 7 – 24″ Griddle with Clamshell Hood – One (1) Required

A. Griddle w/24" Clamshell Hood, electric, counter unit, griddle: 24"W x 20"D x 1" thick smooth steel griddle plate, Accu-Temp control every 12", s/s exterior, 4" adjustable legs, 24" clamshell: mounted on stationary bracket, automatic on/standby activation when hood is lowered, standby when raised, (6) 1000 watt steel sheathed infrared heating elements, 3" preset gap, s/s hood (1)12.0kw & (1)6.0kw, (2) 208v/60/3-ph, 50.0 amps, 12 kw. 1 yr. parts & labor warranty.
   1. One (1) Cleaning Tool, for grooved griddles.
   2. Provide grooving the entire width of the griddle.

4.8 Item 8 – Electronic Menu Boards One Lot (1 Lot) Required

A. Digital Menu Board shall consist of two (2) 42″ commercial LCD horizontal tilt wall displays with PC-based option with scheduling and content delivery system. The Displays shall include two external USB ports, one CAT5 input and audio in/out.
B. Provide two (2) mini-PC (250GB HD, 4GB Ram, 3 year warranty) linked to LCD displays.
C. Provide two (2) LAN players.
D. Provide one (1) LAN manager.
E. Provide one (1) Management Tower PC & Monitor: Processor: AMD Athlon™ II X2 Processor 250 (3GHz, 1M, 2C). Operating System: Genuine Windows® 7 Professional 32-Bit. Memory: 4GB DDR3 SDRAM at 1333Mhz - 2 DIMMS. Hard Drive:500GB SATA hard drive (7200RPM) Optical Drive:DVD +/- RW. Video Card: Integrated ATI Radeon HD4200 Graphics. Sound Card: Integrated 7.1 Channel Audio up to Creative SoundBlaster® X-Fi Xtreme Audio. Communications: Integrated 10/100/1000 Ethernet LAN on system board. Ports: Rear Ports Front Ports. VGA connector USB 2.0 (2). HDMI connector Headphone jack USB 2.0 (4) Microphone jack. RJ45 10/100 Network port. Microphone connector. Line-out connector. Line-in connector. 19-in-1 Media Card Reader. Slots: PCIe x16(1), PCIe x 1(1), PCI(2).
F. Content changes should be made quickly and easily by using a LAN connection for remote content management. The Manager Tower comes preloaded with the digital menu and signage management software. The software is used to administer and distribute content to media players in a Local Area Network (LAN).Provide basic 90 day technical support and two (2) hours of web-based training.

4.9 Item 9 – Refrigerated Equipment Stand – One (1) Required

A. Refrigerator Griddle Stand, two-section, (4) drawers - two drawers accommodates (1) 12" x 20" x 6" & (1) 4" x 20" x 6", two drawers accommodates (2) 12" x 20" x 6", dial thermometer stainless steel top with drip guard marine edge, stainless steel exterior, interior and back, 4" casters, self-contained refrigeration, 1/4 hp., 115v/60/1, 10′ cord & plug. 1 year parts & labor and 5 year compressor warranty.
   1. One (1) Expansion valve, in lieu of cap. System.

2. One (1) Model 50177 Casters, swivel, with brakes (5" diameter rubber tired) set of 4 (6" height).

4.10 Item 10 – Warming Cabinet – One (1) Existing/Relocate

4.11 Item 11 – Breath Protector – One (1) Required

A. Protector shall be mounted to item# 16.
B. 1 1/4'' diam. stainless tubular construction with clear tempered fixed and pivoting front glass and fixed tempered glass top shelf with counter flange mounting and with Heat bar and lighting under glass top shelf.

4.12 Item 12 – Hot Food Wells – Five (5) Required

A. Hot food wells with gentle heating capability of hailo heat and constructed of 18 gauge stainless steel. Each well shall have one adjustable thermostat with a range of 1 through 10 and an indicator light. One flexible water tight tether 36″ long with a 60″ electrical cord 120v, 1 phase, 4.8 amps each.

4.13 Item 13 – Soup Wells – Two (2) Required

A. Food Warmer, top-mount, built-in, electric, for 11-quart round inserts, drain, wet/dry operation, thermostatic controls, non-insulated, stainless steel interior, Wellslok, UL listed, 120v/60/1-ph, 825w, 6.9 amps, direct. Two year parts & 1 year labor warranty. 72" Wiring (thermostatically controlled warmers) per well.
   1. One (1) each unit Adapter Top, to convert 11 qt. round warmer to hold 4 qt. inset.
   2. One (1) each unit Adapter Top, converts 11 qt. round warmer to hold 7 qt. inset.
   3. One (1) each unit 11 qt. Round Inset, with hinged lid, no handles.
   4. One (1) each unit Drain Valve Extension Kit, extension from drain to counter front with remote handle.
   5. One (1) each unit Drain Screen.

4.14 Item 14 - Breath Protector – One (1) Required

A. Protector shall be mounted to item# 16.
B. 1 1/4'' diam. stainless tubular construction with clear tempered fixed and pivoting front glass and fixed tempered glass top shelf with counter flange mounting and with Heat bar and lighting under glass top shelf.

4.15 Item 15 – Breath Protector – One (1) Required

A. Protector shall be mounted to item# 16.
B. 1 1/4'' diam. Stainless tubular construction clear tempered fixed and or pivoting front glass.

4.16 Item 16 – Main Serving Line – One (1) Required

B. Custom fabricated Serving Line, Size: Approx. 30'-0" x 3'-0" x 2'-10" high. Description: Curved unit with (2) Straight segments; Curved 2cm solid surface top with dropped edge, Cut outs for drop-in equipment. Open segmented base, White laminate interior, Adjustable shelf where applicable, Fixed bottom shelf. 6" adjustable legs Customer side will have plastic laminate finish, Black vinyl toe base. Doors on cabinets. Two (2) Load centers (120/208V/3ph 100 Amp each) and one (1) load center 120/208V/3ph 60 Amp) interwired to items# 2, 6, 7, 8, 9, 11, 12, 13, 18, 34 and two (2) outlets for item# 27 and one (1) outlet for future electronic checking system. Stainless lined enclosure for item No. 9, Enclosure for item No. 13. (11) Stainless tray slide brackets, Millwork die wall, laminate nylons with stainless tops, Raised stainless toe base under pylons, Solid surface tray slide with (3) Stainless runners. Item No. 11, 14 and 15 Breath guards. (Laminate color & solid surface selection by Architect).

Missing: Load Center (120/208V/3ph 60 Amp)

4.17 Item 17 - Breath Protector – One (1) Required

A. Protector shall be mounted to item# 22.
B. 1 1/4'' diam. stainless tubular construction with clear tempered fixed and pivoting front glass and fixed tempered glass double top shelf with counter flange mounting and with lighting under glass bottom shelf.

4.18 Item 18 – Sandwich Unit – One (1) Required

A. Refrigerator Designer Line Mighty Top Sandwich Unit, Front Breather, 27" wide, one-section, (12) 1/6 size x 4" deep pans with 10" cutting board, (1) field rehingable door, stainless steel top, front, sides & interior, 3-5/8" casters, rear-mounted Self-Contained refrigeration, 1/5 hp., 115v/60/1, cord & plug. One year parts & labor warranty and five year compressor warranty.
   1. One (1) Crumb catcher.
   2. One (1) Door with cylinder lock.

4.19 Item 19 – Ice and Water Dispenser – Two (2) Required

A. Ice & Water Dispenser, countertop, Symphony SensorSAFE dispense, rear mounted integral ice machine, automatic load, nugget style, air-cooled condenser, 400 lb. production/24 hours, 50 lb. storage capacity, s/s exterior. 115v/60/1-ph, 14.0 amps, NEMA 5-20P.
   1. One (1) each unit Water Filter System with filtration capacity of 3,000 gallons (11,356 liters).
   2. Six (6) Replacement primary cartridges for Water Filter System.
   3. Two (2) cases SafeCLEAN Ice Machine Cleaner (carton of 24 x 7 oz. packets).

4.20 Item 20 – Hand Sinks – Two (2) Existing/Remains

A. No work required.

4.21 Item 21 – Hot/Cold Food Unit – One (1) Required

A. Hot/Cold Drop In Unit, 5-pan size, single tank w/switch for hot or cold operation w/self-contained refrigeration, automatic water fill, (COLD) 3/4 hp., 115v/60/1-ph, 15.2 amps, (HOT) 208/240v/60/1-ph, 28.9/33.3 amps, direct, NSF 7, cULus, one year parts and labor warranty. One (1)3 ft. of flex conduit to the on/off switch for remote mounting.
   1. One (1) Perforated Bottom Strainer Plate, 3" thick.
   2. Four (4) Adapter Top, to convert 12" x 20" round corner warmer to hold (1) 4 qt. and (1) 11 qt. insets.

4.22 Item 22 – Salad Station – One (1) Required

C. Custom Fabricated Salad Station: Finish: Plastic laminate/ stainless & solid surface. Size: 10'-0" x 3'-0" x 2'-10" high. Description: Straight unit; 2cm solid surface top with dropped edge, Cut outs for drop-in equipment, ventilation louvers, Closed millwork base, Hinged doors, White laminate interior, Adjustable shelf where applicable. Plastic laminate interior, Customer side: Black vinyl toe base Solid surface tray slide with (3) stainless runners. Mount item No. 17 sneeze guard with lights and provide remote switch, Install item# 21 and with accessible control box, (8) stainless tray slide brackets, Laminate pylons with stainless tops, Raised stainless toe base under pylons. (Laminate color & solid surface selection by Architect).

4.23 Item 23 – Juice Dispensers – Two (2) Existing/Relocate

4.23 Item 24 – Cup/Glass Rack Lowerators – Five (5) Required

A. 2020-14OZ Cup & Glass Dispenser, drop-in type, single self-leveling tray platform, capacity 425 plastic tumblers up to 14 oz., stainless steel construction.

4.25 Item 25 – Coffee Dispenser – One (1) Existing/Relocate

4.26 Item 26 – Beverage and Condiment Station – One (1) Required

D. Custom fabricated Beverage and Condiment Station, Finish: Plastic laminate, solid surface & stainless, Size: 13'-0" x 21'-0" x 3'-0" x 2'-10" high. Description: "L" Shaped unit; 2cm solid surface top with dropped edge, Cut out for drop-in equipment, closed millwork base, Hinged doors with locks, White laminate interior, Adjustable shelf where applicable, Standard plastic laminate exterior, Black vinyl toe base, Solid surface tray slide with (3) stainless runners, (6) stainless tray slide brackets, Stainless electrical chase, 6" high solid surface back splash, eight (8) Electrical boxes in back splash, Standard laminate pylons with stainless tops, Raised stainless toe base under plastic laminated pylons and one (1) Load center (120/208V/1ph 80 Amp) prewired to electrical outlets in backsplash for items# 19, 23 & 29 and provide three (3) additional electrical outlets for future equipment. (Laminate color & solid surface selection by Architect).

4.27 Item 27 – Mobile Heated Plate Lowerators – Three (3) Required

A. Dish Dispenser, heated, cabinet style, enclosed base, mobile design, two self-elevating adjustable drop-in dish dispenser & thermostat, approximately 28 to 36 bowls or 50 to 72 plates capacity, thermostatically controlled heated system w/recessed control panel, on-off switch, neon pilot light, stainless steel construction, 4" swivel casters. One year warranty parts and labor. 120v/60/1-ph, 6.3 amp, 750 watts, NEMA 5-15P. (VERIFY PLATE SIZE with foodservice director).
   1. One (1) each unit WB Wheel brakes (set of 2).
   2. One (1) each unit PB Full Perimeter Non Marking Bumper.
   3. Two (2) each unit SSTC Dispenser tube cover with handle, s/s.

4.28 Item 28 – Slotted Toaster – One (1) Existing/Relocate

4.29 Item 29 – Conveyor Toaster – One (1) Existing/Relocate

4.30 Item 30 – Coffee Dispenser – One (1) Required

A. Liquid Coffee Dispenser, ambient, 2 dispense heads, Scholle 1910LX connector, bag-in-box capacity (2) 1/2 (1.9 litre) & (1) 1 gallon (3.8 litre), dispense ratio 45:1 up to 100:1, refill or rinse LED lights, black decor, 4" adjustable plastic legs, 120v/60/1-ph, 14.2 amps, NEMA 5-15P, cord attached, UL and NSF.
   1. One (1) Easy Clear Medium/High Water System, 10,000 gallon, reduced sediment, chlorine taste & odor, 1.5 gpm, scale inhibitors with "L" model, equipment protection, 10 micron, includes: a head assembly, integral mounting bracket and cartridge filter, Quick Connect, NSF.
   2. One (1) Water Filter Head.
   3. One (1) Water Filter Gauge.
   4. One (1) Cartridge, high performance.

4.31 Item 31 – Hot/Cold Beverage Dispenser One (1) Future

4.32 Item 32 – Mobile Cup/Glass Rack Dollies – One Lot (1 Lot) Required

A. Dish Rack Dolly, platform design with push handle, single stack, designed for 20" x 20" racks, stainless steel construction, 4" swivel casters.
   1. One (1) each unit B Corner Bumpers, set of 2 on front side of cart with rotating bumpers.
   2. One (1) each unit (set of 2) on push handle side.

4.33 Item 33 – Beverage and Condiment Station – One (1) Required

E. Custom fabricated Beverage and Condiment Station, Finish: Plastic laminate, Stainless and solid surface, Size: 13'-0" x 10'-0" x 3'-0" x 2'-10" high. Description: "L" Shaped unit; 2cm solid surface top with dropped edge, Cut out for drop-in equipment, Closed millwork base, Hinged doors with locks. White laminate interior, Adjustable shelf where applicable, plastic laminate exterior, Black vinyl toe base, solid surface tray slide with (3)

Stainless runners, (6) stainless tray slide brackets, Stainless electrical chase. 6" high solid surface back splash, five (5) electrical boxes in back splash, plastic laminate pylons with stainless tops, Raised stainless toe base under pylons, one (1) Load center (120/208V/1ph 80 Amp)prewired to electrical outlets for items# 19, 28, 30 & 31 and provide one (1) additional electrical outlet for future equipment. (Laminate color & solid surface selection by Architect).

4.34 Item 34 – Drop-in Heated Plate Lowerators – Two (2) Required

A. Heated bowel Dispenser, drop-in type, single self-elevating dish dispensing tube, maximum dish size approximately 7-3/8" dia., stainless steel construction. 120v/60/1-ph. 2.5 amps, NEMA 5-15P. VERIFY BOWEL SIZE.
   1. One (1) each unit Dispenser tube cover with handle, s/s.

PART 5 DETAILS OF CONSTRUCTION

5.1 DETAIL DRAWINGS

A. The following details are a part of these specifications and shall be referred to for design requirements:
   a) N/A

END OF SECTION