

## SECTION 114000 – FOODSERVICE EQUIPMENT

### PART 1 - GENERAL

#### 1.1 GENERAL REQUIREMENTS

- A. Work of this Section shall conform to the requirements of the Contract Documents including drawings and general provisions of the Contract, General and Supplementary Conditions and Division 01 Specification Sections.

#### 1.2 BIDS

- A. Kitchen Equipment Contractor (KEC) is a primer-contractor and is to provide and install all items listed in this section and as detailed on food service drawings.
- B. Any denotation to specific trade responsibility (ie: Kitchen Equipment Contractor (KEC), Electrical Contractor (EC), Plumbing Contractor (PC), etc.) mentioned shall fall under the scope of the General Contractor (GC). The GC is responsible to hire all necessary sub-contractors.
- C. General Contractor (GC) shall make all final electrical, plumbing and exhaust connections. The Kitchen Equipment Contractor (KEC) shall perform initial startup and testing of equipment.
- D. Substitutions: When a product or material is specified by name and or model number, as noted in these specifications, such specifications establishes the standard type and quality considered most satisfactory for the particular purpose in the building. The bid proposal therefore should be based thereon, so that all bidders bid under the same conditions. Another product or material of the same type that meets the requirements may be submitted for consideration as a substitute only under the following conditions:
  - 1. Requests for substitution must be submitted in writing at least ten (10) days before the date set for the receipt of bids for review and approval by the design professional. If the substitution is found to be equivalent, all bidders will be notified prior to the receipt of bids.
  - 2. In providing substitution requests, the bidder must prove equivalence of the substitution and furnish detailed specifications and catalog cuts or drawings. Failure to identify exceptions or deviations from equipment specified must be interpreted to indicate that the product offered complies with the specification in every respect.
- E. Owner, Architect and Food Service Consultant reserves right to waive any informality, or reject any or all bids and any parts thereof, or to accept that bid as a whole or part that in his judgment is for the best interest of Owner. All bids to have on Contractor's letterhead itemized cost of each item of equipment, otherwise bid will be rejected.
- F. Contract documents convey a method of construction for custom fabrication; however this may or may not be the appropriate method based on selected fabricators industry knowledge and standards. It will be the responsibility of the selected fabricator to interpret and apply appropriate methods of construction for full functionality of custom fabrication.

### 1.3 WORK INCLUDED

- A. KEC shall coordinate with other trades or sub-contractors in order that whole installation may result in the highest grade possible.
- B. KEC shall provide and install only such valves, traps, faucets, shut-offs, reducing pressure valves, relief valves and other specialty items required within equipment and as hereinafter specified.
- C. KEC shall make all necessary cut-outs and knock-outs where required on equipment to accommodate electrical receptacles, switches or other electrical outlets and equipment, together with such cut-outs as required for passage of gas or plumbing piping, etc.
- D. KEC shall stack and remove rubbish waste material, crating, etc., resulting from work and keep the premises clean at all times. Upon completion of the installation, thoroughly and finally clean all equipment ready for use.

### 1.4 POWER AVAILABLE

- A. Electric Voltage: 120/208/480 volt, 60 cycle, 1 & 3 ph.
- B. Water Pressure: Typical Food Service Equipment range 25 to 90 PSI, if required, pressure reducing valves provided by Plumbing Contractor.
- C. Water Temperature(s):
  - 1. 110°-120° Fahrenheit max at hand washing sinks, work sinks and preparation sinks.
  - 2. 120°-140° Fahrenheit max at 3-compartment pot sink, dishwashers and hose reel assembly.
  - 3. 110°-120° Fahrenheit max at cooking equipment with faucet assembly.
- D. Gas Pressure: Typical Food Service Equipment range 5" W.C. to 10" W.C., if required, a gas pressure reducing valve at main feed, prior to equipment connection, to be provided by Plumbing Contractor.

### 1.5 GENERAL CHARACTERISTICS OF EQUIPMENT

- A. Electrically Operated
  - 1. Electrically operated equipment to be listed by Underwriters Labs., Inc.
  - 2. Motors: Up to and including 3/4 horsepower, shall be 120/60/1.
  - 3. Motors: Over 3/4 horsepower, 208/60/3, unless otherwise indicated.
  - 4. Ranges, food warmers, etc., over 2.0 kW, 208/60/1 or 208/60/3, unless otherwise indicated.
  - 5. Electrically heated equipment, etc., 2.0 kW and under, 120/60/1.
  - 6. 1 ph. electrical plug-in units with 3 wire cords; 3 wire cap.
  - 7. 3 ph. electrical plug-in units with 4 wire cords; 4 wire cap.
  - 8. Motor driven equipment: equipped with starting switch.
  - 9. Motors: equipped with overload protection.
  - 10. Wiring on fixtures, including operating switches and pilots, furnished by Kitchen Equipment Contractor.

- B. Submit in writing to Architect and Food Service Consultant for approval, schedule showing proposed electrical characteristics of each piece of equipment and disconnect means provided.
- C. Punch holes for, and install hood and walk-in cooler/freezer lights and concealed conduits. The interconnection of same, including control switch, wiring, inter-wiring between sections, etc., by Electrical Contractor.

#### 1.6 WORK EXCLUDED FROM THIS DIVISION

- A. The following work is to be performed by other trades or sub-contractors and is not the responsibility of the Kitchen Equipment Contractor. The GC is responsible to hire all necessary sub-contractors.
  - 1. Electrical Contractor
    - a. Make connections to all food service equipment as shown.
    - b. Furnish disconnect switches.
    - c. Interconnecting of all exhaust hood lights, switches, control packages, interfaces, etc. including inter-wiring between sections of exhaust hoods.
    - d. Interconnecting of control switches as required on equipment shown, and all other components which come as part of any equipment shown on plan.
    - e. Interconnecting of any equipment, including, but not limited to, walk-in coolers/ freezers monitoring, exhaust hood monitoring and/ or fire protection monitoring with building management systems.
    - f. Review all manufacturer approved installation methods/ diagrams and comply for proper installation of equipment being furnished.
  - 2. Plumbing Contractor
    - a. Make hot and cold water, waste and gas connections to all kitchen equipment shown, furnishing all necessary shut-offs, traps, backflow preventers, vacuum breakers, grease traps, drain line runs, etc.
    - b. Install all faucets, pot fillers, filters and pressure regulators as furnished by Kitchen Equipment Contractor.
    - c. Interconnecting of any and all other components that come as part of any other equipment shown.
    - d. Provide floor drains and floor sinks where shown and indirect piping to floor drains and floor sinks as indicated on drawings.
    - e. Review all manufacturer approved installation methods/ diagrams and comply for proper installation of equipment being furnished.
  - 3. Ventilation Contractor
    - a. Furnish size, shape and location of vent collars for exhaust hood and make connections to these collars.
  - 4. General Contractor
    - a. Provide and/or coordinate all work to the floors, walls and ceilings of the space.
    - b. Provide wall blocking where required and as indicated on food service drawings.

### 1.7 SUB-CONTRACTORS TO KITCHEN EQUIPMENT CONTRACTOR

- A. Fire Protection Contractor for the wet chemical protection system within exhaust hood systems only and Refrigeration Contractor for the remote refrigeration packages for walk-in coolers/freezers, rack systems, etc. are typical sub-contractors to the Kitchen Equipment Contractor.
- B. KEC to provide the name and addresses of all sub-contractors furnished to Architect/Owner and Food Service Consultant at time of submitting shop drawings. Selection of sub-contractors must be approved by them; and if in their judgment any fail to prosecute work in strict accordance with drawings and contract, after due notice from Owner or his agent, shall discharge same, but this in no way releases Kitchen Equipment Contractor from his obligations and responsibility under the contract.
- C. Every sub-contractor bound by terms and provisions of the contract so far as applicable to his work. Nothing contained herein shall create any contractual relations between any sub-contractor and Owner.
- D. Kitchen Equipment Contractor fully responsible to Owner for acts and omissions of his/ her sub-contractors.

### 1.8 SHOP DRAWINGS, ETC.

- A. Immediately upon award of Contract and within 4 weeks, submit to Architect/Owner and Food Service Consultant, drawings for approval. Submit 1/4" scale rough-in drawings showing locations of plumbing and electrical connections with all requirements indicated at point of connection; use of a legend or numbered connection plan will be cause for drawing rejection. Prior to fabrication, submit to Architect for approval 1/2" scale shop drawings showing plan, elevations and isometric views covering all items of work. Drawings to show dimensions and details of construction, installation and relations to adjoining and related work where same requires cutting or close fitting. Show reinforcement, anchorage, etc., required for complete installation. After correction and approval of above, submit sets for record, then afterwards as many additional copies as required by client.
- B. Submit in same manner as above, drawings showing masonry bases, depressed floors, positions of walls, requirements for ceiling hangers, wall blocking, and any other special conditions necessary for complete and correct correlation of various trades for satisfactory installation of all equipment shown on drawings.
- C. Manufacturer's names, cuts, descriptive data, analysis of tests, rated capacities and other information necessary for approval of standard manufactured articles and equipment furnished to Architect/Owner and Food Service Consultant for approval before ordering or purchasing. This submission made in same manner as above. All cuts marked with item number, mechanical characteristics, accessories furnished and bound in folders.

### 1.9 GENERAL

- A. No machine or equipment acceptable from any manufacturer not having had equipment of approximately the same type and design as that specified operating successfully for at least 5

years. Machines installed for test purposes shall not come within the category of successful commercial operation.

- B. Architect/Owner and/or Food Service Consultant privileged to inspect material and fabrication at Kitchen Equipment Contractor's or its sub-contractors factory at any time.
- C. Before proceeding with shop work, Kitchen Equipment Contractor to verify all measurements at premises. Where required dimensions are not immediately obtainable and delay in waiting for these dimensions would cause work to be seriously delayed, the matter shall be referred to Architect for a decision. In obtaining measurements, Kitchen Equipment Contractor shall consider work requirements of other trades and equipment designed and fabricated to provide necessary clearance for surrounding and adjoining work.
- D. Kitchen Equipment Contractor responsible for making any and all necessary adjustments to complete his work in a workmanlike manner, as approved by Architect/Owner.
- E. Dimensions as indicated on drawings and specifications are approximate, and are to be adjusted if and where necessary to suit job conditions and field measurements.
- F. Tops of tables, shelves, tops and exterior panels of cabinets, counters, doors, drainboards, etc., to be constructed of a single sheet of metal. Where size of equipment requires more than 1 sheet of metal, sheets butt joined with joints continuously welded full length. No joints less than 18" from an edge or end of a piece of equipment. In addition, all joints shall have battens or stiffeners welded to jointed material, ground smooth and polished.
- G. Appliances of rigid construction free from objectionable vibration and quiet in operation.
- H. Electrical heating elements shall conform to latest standards of National Electrical Manufacturer's Association and Underwriters Labs., Inc., where applicable standards have been set up by such agencies.
- I. Motors of ample power to operate machines for which designated under full load operating conditions without exceeding nameplate ratings. Horsepower requirements on driven equipment determined by manufacturer, based on normal operation of maximum capacity.
- J. Motors drip-proof, splash-proof or totally enclosed type, having two-hour duty cycle and ball bearings (except small timing motors which may have sleeve bearings). All motors shall have windings impregnated to resist moisture. Motors located where adjacent to deposits of dust, lint, etc., totally enclosed type.
- K. It is the responsibility of the Kitchen Equipment Contractor to supply and mount all electrical outlets, switches, controls, etc. within table/counter back splashes, aprons, panels, etc. and to provide stainless steel cover plates as required. Furthermore, it is the responsibility of the Electrical Contractor, in coordination with the Kitchen Equipment Contractor, to make final interconnections within table/counter interior to junction boxes, outlets, switches, controls, etc. for equipment indicated.

#### 1.10 STAINLESS STEEL (S.S.)

- A. Where S.S. is specified, it shall be Type 304, nickel bearing iron alloy, containing approximately 17.0% to 19% chromium, 8% to 10% nickel, not more than 0.2% carbon, and not more than 2.0% of other alloying elements; designed being austenitic (non-magnetic).
- B. S.S. free from scale with all surfaces polished to a high commercial finish. All welding and exposed welds hereinafter specified, must be ground down and polished smooth to a #4 finish so that no evidence of welding will appear. Unexposed welds on underside of counter or tables ground smooth and treated with an acid solution to remove weld discoloration and oxidization and to arrest corrosion.
- C. Undersides of all counters, work tables, sinks, drain boards, etc., after fabrication, to have one (1) heavy coat of sound deadening material applied as allowed by local codes.
- D. Gauges for sheet iron and sheet metal, U.S. Standard.
- E. Rivets, welds, bolts, screws, nuts and washers to be steel except where brass or S.S. is fastened, in which case they shall be brass or S.S., respectively. Where dissimilar metals are fastened, welds, bolts, rivets, screws, nuts and washers, highest grade metal. Spacing and extent of welds, rivets, bolts and screws such as to insure suitable fastening and prevent bulging of metals fastened.

#### 1.11 SANITATION

- A. All custom built equipment constructed in accordance with standard No. 2, 4 & 7 of National Sanitation Foundation Testing Laboratory, manufactured by a company approved by N.S.F. and carry their stamp of approval. Kitchen Equipment Contractor must have "Registered" numbered seal of N.S.F. approval.

#### 1.12 OPERATING INSTRUCTIONS

- A. Kitchen Equipment Contractor shall leave all items of equipment in good, operating condition and furnish the services of a "qualified" competent manufacturer's representative to instruct Owner's employees in proper use and care of equipment. Representative on call for as long a period as is necessary to assure Owner that such instruction is thoroughly understood.
- B. Kitchen Equipment Contractor shall be responsible for scheduling of equipment demonstrations and/or training and shall provide a detailed list of expected dates, times and manufacturer's representative to be present (in attendance) for each piece of equipment.
- C. Kitchen Equipment Contractor or his qualified manufacturer's representative, thereafter, shall make all necessary calls during warranty period.

#### 1.13 SAMPLES

- A. After Award of Contract, when requested, Kitchen Equipment Contractor shall supply Architect with samples of fabricated equipment, such as corner of table with a rolled or inverted "V"

edge, corner of dish table, overshef, drawer assembly, table leg with foot and gusset, or as specifically requested.

#### 1.14 GUARANTEE

- A.
- B. Kitchen Equipment Contractor shall guarantee, as part of the bid and/or contract, workmanship, material and equipment for a period of 1 year from date of equipment final install and project turnover to Owner, and shall remedy any defect due to faulty workmanship or materials which may appear within guarantee period.
- C. Manufacturer's operation and maintenance manuals on equipment, etc., turned over to the Owner in duplicate, bound in a folder and marked accordingly.

#### 1.15 EQUIPMENT CONSTRUCTION AND STANDARDS

- A. Where initials S.S. are used, they refer to "stainless steel;" C.P. refers to "chrome plated;" N.I.C. refers to "not in contract;" G.I. refers to "galvanized iron;" F.D. refers to "floor drain", and F.S. refers to "floor sink."

#### 1.16 WASTES AND OVERFLOWS

- A. Sinks to have the following waste and overflow assemblies:
  - 1. For 1-1/2" NPT: Fisher model 74043 or approved alternate. Lever handle waste outlet with overflow assembly, 3-1/2" sink opening, self-centering stainless steel face flange with flat strainer, 12 gpm max flow rate, stainless steel lever handle with ball, overflow head with stainless steel faceplate and chrome plated cast red brass drain body.
  - 2. For 2" NPT: Fisher model 74043 or approved alternate. Lever handle waste outlet with overflow assembly, 3-1/2" sink opening, self-centering stainless steel face flange with flat strainer, 12 gpm max flow rate, stainless steel lever handle with ball, overflow head with stainless steel faceplate and chrome plated cast red brass drain body.

#### 1.17 WATER INLET LOCATION

- A. Located in all cases above the positive water level to prevent siphoning of liquid into water system. Wherever conditions require water inlet below such level, a suitable type of vacuum breaker shall be placed on fixture and form part of same to prevent such siphoning.
- B. All faucets furnished by Kitchen Equipment Contractor as specified. Traps furnished by Plumbing Contractor.

#### 1.18 PITCH AND DRAINAGE

- A. Wherever a fixture is used with waste or drain outlet, surface shall have distinct pitch towards outlet. Drainboards and tables that contain or adjoin sinks shall have a definite pitch towards sinks. Where necessary, surfaces creased and grooved to give a definite pitch.

## 1.19 SINKS

- A. #14 gauge S.S. interior corners rounded to 1" radius horizontally and vertically, forming a cove in bottom. All joints butt edged. Sink sizes given, inside measurements.
- B. Bottom of each compartment creased to center and fitted with a rotary drain as described in section 1.16, hereinbefore specified. Waste lever not to protrude beyond body of sink. Sinks to have overflows installed by Kitchen Equipment Contractor.
- C. Overflow to consist of 1-1/2" chrome plated brass strainer plate, fitted in back of each compartment at proper level directly connected to waste outlet with 1-1/2" chrome plated brass pipe.
- D. Back of sink extended integrally approximately 12" above working level, back 2-1/4" on 45° angle towards rear and then flanged down 1" and punched to accommodate faucets.
- E. Front and both ends, unless otherwise specified and shown, finished on top edge, 3" above working level, with 1-1/2" diameter, 180° welded integral roll. Exterior corners rounded to a 2-1/2" radius, all integrally welded.
- F. Sinks and drainboards finished on front and back edges only and left with straight edge on ends, so that drainboards may be welded thereto, forming integral units with top edge of rolled rim curbing formed on one horizontal plane across front to unit though surfaces of drainboards pitched to sinks.
- G. Multiple compartment sinks divided with double wall #14 gauge S.S. partitions, all corners rounded same as corners in sinks, continuously welded in place.
- H. Back, bottom and front of one continuous piece with no overlapping joints or open spaces between compartments.

## 1.20 SINK BOWL BUILT INTO TABLE TOP

- A. Sink constructed integral with table top #14 gauge S.S. having all interior corners coved vertically and horizontally forming a cove in bottom. To have overflow, lever waste outlet, etc..., as hereinbefore specified for sinks in spec section 1.19.
- B. All joints butt edged and welded, ground and polished, so that no evidence of welding will appear. All sink sizes inside measurements. Table top where shown, punched to receive deck type combination faucets, provided by Kitchen Equipment Contractor.

## 1.21 FAUCET AND BASKET DRAIN ASSEMBLY

- A. Sinks to have the following faucet assemblies:
  - 1. 3-Compartment Sink, Potwash:
    - a. 1 ea. Fisher model 74306 or approved alternate. Pre-Rinse assembly with 1.3 gpm flow rate or less, splash/ wall mount, 8" centers, add-on faucet 12" stainless steel tubular swing spout with 4" wrist blade handles, 36" flexible gooseneck hose with



spray head, stainless steel spring with wall bracket, compression valves, 1/2" NPT female inlets, ADA compliant, NO LEAD and NSF approved. Deck mount assembly model 75485.

- b. 1 ea. Fisher model 60798 or approved alternate. Faucet with 2.2 gpm flow rate or less, splash/ wall mount with 4" wrist blade handles, 8" centers, 12" stainless steel tubular swing spout, compression valves, 1/2" NPT female inlets, ADA compliant, NO LEAD and NSF approved. Deck mount assembly model 57665.
- 2. 2-Compartment Sink, Preparation:
  - a. 1 ea. Fisher model 57665 or approved alternate. Faucet with 2.2 gpm flow rate or less, deck mount with 4" wrist blade handles, 8" centers, 12" stainless steel tubular swing spout, compression valves, 1/2" NPT female inlets, ADA compliant, NO LEAD and NSF approved. Splash/ wall mount assembly model 60798.
- 3. Work Sink (Built-in, Welded-In):
  - a. 1 ea. Fisher model 57665 or approved alternate. Faucet with 2.2 gpm flow rate or less, deck mount with 4" wrist blade handles, 8" centers, 12" stainless steel tubular swing spout, compression valves, 1/2" NPT female inlets, ADA compliant, NO LEAD and NSF approved. Splash/ wall mount assembly model 60798.
- 4. Hand Sink:
  - a. 1 ea. Fisher model 58696 or approved alternate. Faucet with 2.2 gpm flow rate or less, deck mount with 4" wrist blade handles, 4" centers, 6" stainless steel swivel gooseneck spout, compression valves, 1/2" NPT female inlets, ADA compliant, NO LEAD and NSF approved. Splash/ wall mount assembly model 62650.
- B. All plumbing fixtures shall be certified CSA, ASME A112.18.1/CSA B125.1, AB1953/HSC 116875, Vermont Bill S152, NSF/ANSI 61 sec 9, annex F and G, NSF/ANSI 372 low lead content, ASTM F2324.

#### 1.22 DRAINBOARDS

- A. #14 gauge S.S. full width of sink carried up approximately 12" at back and where adjacent to wall and finished same as heretofore described for back of sink, and having 3" high curbing at front and ends not adjacent to walls and finished with integral 1-1/2" diameter 180° roll, unless otherwise specified.
- B. Drainboards continuously welded to sinks.
- C. Drainboards 30" long or less shall have 1-1/2" #16 gauge S.S. tubular braces secured at underside near front and welded to S.S. gusset at leg anchor. All others to have legs and cross bracing with full length and width undershelf as specified for tables.

#### 1.23 TABLES WITH S.S. TOPS

- A. Tops of #14 gauge S.S. 1 piece construction with all edges turned down into 2" integral 180° roll with all corners rounded to 2" radius forming a bullnosed corner. Corner welded and polished smooth.

- B. Table tops thoroughly cross braced with 4" x 1" S.S. channel stiffeners #14 gauge welded to underside. All cross braces spaced not over 24" on center.
- C. Table tops adjoining walls or adjacent equipment carried up approximately 6" and returned 1", down 1" at top and ends. Intersections of table top and raised edge coved to 1" radius. Where backsplash is exposed, it shall have finished S.S. back.
- D. It is the responsibility of the K.E.C. to supply and mount all electrical outlets, switches, controls, etc. within table/counter back splashes, aprons, panels, etc. and to provide S.S. cover plates as required. Furthermore, it is the responsibility of the Electrical Contractor, in coordination with the Kitchen Equipment Contractor, to make final interconnections within table/counter interior to junction boxes, outlets, switches, controls, etc. for equipment indicated, if required.

#### 1.24 LEGS AND CROSSRAILS

- A. 1-5/8" O.D. #14 gauge S.S. tubular-type with S.S. bullet shaped feet having minimum vertical adjustment of 1-1/2" without showing threading or adjusting bolts. Feet fully enclosed on bottom. Adjustment of feet by means of a threaded shank attached to foot and screwed into a properly secured threaded member inside of leg. Construction of leg such that it shall fit over shank of foot so no liquid or other material can work their way into legs or foot.
- B. Tops of legs attached to enclosed conical gussets of heavy gauge S.S. Gussets welded to #14 gauge S.S. 4" x 1" channels to underside on which they appear. Crossrails 1-1/2" O.D. #14 gauge S.S. coped and welded to legs approximately 10" A.F.F. or as specified.

#### 1.25 OVERSHELF - TABLE TYPE

- A. #16 gauge polished S.S. with all edges turned down and finished in a 1-1/2" diameter 180° roll - corners bullnosed, welded 1 piece construction.
- B. Shelves supported by 1" O.D. #14 gauge S.S. tubular uprights, tapered at top and flared at bottom, secured to table top with concealed inner tie rods, bolts and nuts. Uprights spaced approximately 42" on center not to interfere with table top proper. When uprights are located in other areas in addition to each end of table then they shall be cantilevered.

#### 1.26 OVERSHELF - WALL TYPE

- A. #16 gauge polished S.S. with back edge turned up 2", remaining ends turned down in 1-1/2" diameter 180° roll with corners bullnosed welded, ground and polished.
- B. Shelves supported by #12 gauge S.S. cantilever brackets. Shelf spaced 1" from walls when in place and secured to same with C.P. toggle bolts. Undersides secured to brackets with concealed welded studs, nuts and washers. Brackets spaced approximately 42" on center.

## 1.27 UNDERSHELVES

- A. #16 gauge polished S.S. full length and width of table with all edges turned down into 2" wide channel. In way of table legs, shelf notched to fit contour of legs and fitted to same in neat, workmanlike manner to eliminate unsanitary crevices, fully welded, ground and polished.
- B. Undershelves reinforced on underside with welded 4" x 1" longitudinal channels of #14 gauge S.S. where applicable. All signs of welding on shelf surface removed.

## 1.28 DRAWERS

- A. Of #18 gauge S.S. all interior corners coved to a 1" radius both vertically and horizontally. All welds ground and polished to a uniform finish.
- B. Front of #14 gauge polished S.S. and will extend on both sides of drawer body to conceal slides, corners welded, ground and polished. Space between drawer front and body fully enclosed at bottom, back and both sides by means of a #20 gauge S.S. filler, spot welded to drawer front and body, to provide a fully sealed, vermin-proof enclosure. Drawer front provided with a 5" C.H.G. # P46-1010 S.S. pull handle fastened in place by means of a concealed screws.
- C. Drawer slides of #14 gauge S.S. fitted with 4 case hardened ball bearing rollers. Track attached to drawer is to have upper edge channel shaped to fit contour of roller rim to provide a positive drawer guide and prevent jarring. This drawer track firmly spot-welded to body. Outer track provided with auto stops to lock without the use of tools.
- D. Where specified, drawer provided with removable synthetic carving board. Carving board is to slide into enclosure under drawer made of #14 gauge S.S. and extending across underside of carving board, with both sides turned up and welded to slide assembly. The 2 sides provided with #14 gauge S.S. angles with stops at rear fastened in place 1/8" above top surface of carving board to provide guide and storage compartment when carving board is not in use. Carving board is to measure approximately 21" x 21" x 1" thick.
- E. Tool drawer 20" x 20" x 5" deep, bread drawer 20" x 20" x 10" deep. All drawers to have 4 pin paracentric keyed-alike built-in locks same as sliding and hinged doors. C.P. where exposed.

## 1.29 NOT USED

## 1.30 EXHAUST HOOD

- A. Exhaust Hood material, construction, etc. to be in conformance with IMC section 507.
- B. Dimensions approximately as shown on contract drawings and mounted at 80" A.F.F. to underside of hood. Final dimensions to be determined in field by Kitchen Equipment Contractor.
- C. Proper anchorages, etc..., installed in ceiling joists, slab, etc..., by Kitchen Equipment Contractor prior to final finish of ceiling.

- D. Body of #18 gauge stainless steel front, back and sides; straight as indicated on contract drawings. All joints to be flush welded. Where field joints occur, provide a pair of transverse frames, butted together and securely fastened following contour of hood structure.
- E. Bottom rim of hood attached to channel of #14 gauge STAINLESS STEEL with mitered welded corners and butted field joints. Cross section inside of channel to measure approximately 2-1/2" horizontally, flanged upward tightly against interior lining of hood.
- F. Above dishwashing machine, kettles and steamers or non-grease producing equipment, hood provided with sloped baffle at back arranged at 45° angle of #18 gauge stainless steel. Baffles to have sliding dampers of #16 gauge stainless steel mounted in #14 gauge stainless steel channel tracks. Each damper to have stainless steel handle fastened with concealed bolts.
- G. Above ranges, ovens, fryers, griddles, etc. or grease producing equipment, hood provided with built-in filters at back extending full length and arranged at an angle of 45° easily removable without use of tools. Filters to be approximately 20" x 20" x 2" thick, of STAINLESS STEEL and expanded metal construction or as further indicated on contract drawings. Filters set into #14 gauge STAINLESS STEEL filter frame, bottom of which is integrally installed with back of hood and grease gutter for easy cleaning. Quantity and size of openings in plenum chamber as indicated in contract documents.
- H. Hood(s) provided with STAINLESS STEEL hanger brackets, welded to top of hood, spaced not more than 36" on center.
- I. Section of hood below ceiling or soffit, enclosed with vertical facing of #18 gauge STAINLESS STEEL. Panels not to exceed 36" in width, easily removable where required, provided with recessed finger grip or similar. Where panels meet at vertical joints flanged inward 1" to form a hairline joint. Channel extended 2" beyond perimeter of hood and provided with concealed full length angle member of 2" x 2" x 3/16" G.I. with clips for bolting to hanger angles, spaced approximately 36" on center. Hanger angles attached to 2" x 2" x 3/16" angle frame fastened to ceiling slab. Panels held in place at ceiling with 2" x 2" x 1/8" STAINLESS STEEL angle trim all around.
- J. Hood(s) provided with recessed or flush vapor-proof LED light fixtures, approximately 12" X 12" style or 48" strip style, pre-mounted by manufacturer. Light fixture with bulb(s), as provided by specified exhaust hood manufacturer, refer to Part 2 Products. All wiring and interconnections by Electrical Contractor.
- K. All exhaust hood controls, switches, etc... to be mounted @ 48" AFF. This is to be the maximum height allowed.
- L. All wiring and interconnections for controls, switches, fans, solenoid, shunt trips, etc... by Electrical Contractor. This includes any requirements to and from remote panels, switches and control packages.
- M. Must be tested and comply with the most current codes (or per local jurisdiction) UL-710, International Mechanical Code (IMC), and NFPA 96.

## 1.31 NOT USED

## 1.32 FIRE PROTECTION SYSTEM

- A. The system shall be a pre-engineered cartridge-operated type R-102 system utilizing Liquid Ansul agent, with a Fixed Nozzle distribution network. It shall be furnished and installed in compliance with UL Standard 1254, UL Standard 300, NFPA 96-2008 and any prevailing statutes or codes including automatic shut-down of all cooking appliances per code section 44 of NFPA 17A-27-2002.
- B. System to provide connection to building Fire Alarm System per NFPA 17A; Section 3-2.1.5.
- C. Fire protection remote pull stations mounted @ 48" AFF, located 10 ft. minimum to 20 ft. maximum from exhaust hood(s).
- D. The extinguishing agent shall be a specifically formulated aqueous solution of organic salts contained in a S.S. tank with 3 gallons minimum capacity, and able to withstand test pressure of 330 PSI. A welded S.S. bracket shall be provided for mounting the tank.
- E. The regulator releases mechanism shall be capable of providing sufficient expellant gas to discharge enough agent to meet the minimum nozzle discharge requirements. The mechanism shall have a visual indicator of "fired" condition. This mechanism shall be capable of being operated by fusible link detection, remote manual release and local manual release. The mechanism should be housed in a S.S. enclosure with cover containing identifications thereon.
- F. Each discharge nozzle to be listed with UL approval for placement and size. Each nozzle shall have a rubber blow-off cap to keep the nozzle tip orifice free of cooking grease build-up. All exposed piping to be chrome plated finish, and there shall be no exposed threads.
- G. Kitchen Equipment Contractor to furnish mechanical (electrical) gas valve, up to 3" in size and coordinate the install/provisions to shut-off all fuel supplies to all cooking appliances beneath Type I exhaust hood upon activation of system. If electrical gas valve is to be utilized, Kitchen Equipment Contractor to furnish reset relay push button.

It is the responsibility of the Plumbing Contractor to install, coordinate and make any provisions necessary for complete operation of gas valve.

It is the responsibility of the Electrical Contractor to furnish and install electrical wiring, relays, etc... and make any provisions necessary for complete operation of gas valve. In addition, Electrical Contractor to furnish and install automatic equipment necessary to shut-off all electric beneath Type I exhaust hood upon activation of system.

- H. Kitchen Equipment Contractor to furnish and install a Class K Fire Extinguisher, dedicated to each room where a Type I exhaust hood is installed.
- I. Upon completion of installation, the installer to perform a wet chemical test or at the time of the test, the authority having jurisdiction may allow the Contractor to use flushing concentrate and water solution. However, whichever is permitted, it must be in compliance with Code. This test shall activate the entire system, except the agent supply tank, which will be substituted by the test tank of like pressure and size. Following a satisfactory test, the original tank shall be

replaced. The system shall then be certified to be in working order and all authorities shall be so advised in writing. Provide Owner with copies of all satisfaction/acceptance tests.

- J. The system to be furnished and installed by a factory distributor in accordance with the manufacturer's instructions. This shall include mounting of the system units, manual releases, nozzles, actuating devices, and the running of all pipe and control tubing applicable to the R-102 system. If and when requested, submittal drawings concerning the fire system shall have affixed the seal and signature of a licensed engineer for the State in which they are to be installed. A 1-year service contract and maintenance program to be provided.
- K. Kitchen Equipment Contractor is required to submit a copy of the hood suppression system shop drawing to the local authority having jurisdiction for approval, as well as submission to the Architect. In addition, shop drawings when submitted, must be signed and sealed by an engineer licensed to practice in the State where the system is to be installed.

#### 1.33 DISH TABLES - SOILED AND CLEAN

- A. #14 gauge polished S.S. with exposed edges finished in 3" high curbing with a 1-1/2" diameter, 180° rolled trim at top, corners bullnosed, welded. Where adjacent to wall, top carried up 12" integrally at top and ends. All joints in top welded and free of buckles and weld marks. When applicable, where top (also raised back), adjoins dishwashing machine, same flanged down 1" into machine and secured water tight, backsplash in this area brought forward diagonally to machine to form a baffle. Tops thoroughly cross braced with 4" x 1" channel stiffeners of #14 gauge S.S. and welded to underside. Cross bracing approximately 24" on center, running front to back. All corners in top rounded to 1" radius, vertically and horizontally.

#### 1.34 NOT USED

#### 1.35 NOT USED

#### 1.36 NOT USED

#### 1.37 NOT USED

#### 1.38 NOT USED

#### 1.39 SERVING COUNTER

- A. Of size and shape as shown. Top of #14 gauge polished S.S. rolled down in a 2" diameter 180° roll on all exposed edges with corners bullnosed, welded. Top secured to counter base by means of concealed S.S. studs, nuts and washers. Angle frame under top sheathed with sound deadening material.
- B. Base constructed with interior framing of 1-1/2" x 1 1/2" x 1/8" galvanized steel angle with all joints welded.

- C. Angle framework concealed on the interior with #18 gauge polished S.S. sheathing. Exterior facing of base cabinet and ends to have sheathing of Plastic Laminate paneling laminated to 3/4" thick solid core, exterior grade marine plywood, panel length not to exceed 36". Color and style of paneling selected by Architect. Each panel of length as indicated, full height of counter and splined hairline joints. Panels and trim secured to interior framing by means of concealed welded studs, nuts and washers. Or constructed of alternate materials as detailed on drawings.
- D. Interior of all available space provided with bottom and intermediate shelf of #16 gauge S.S. turned up approximately 2" at rear and ends, and down 1-1/2", and in 1/2" channel shape at front.
- E. Mounted on masonry base, height as indicated on drawings or 6" high 14 gauge S.S. legs with S.S. removable toe base, where indicated. All openings in top flanged downward approximately 1" around their entire perimeter. Top cut out for and provided with equipment as hereafter specified.
- F. It is the responsibility of the K.E.C. to supply and mount all electrical outlets, switches, controls, etc. within table/counter back splashes, aprons, panels, etc. and to provide S.S. cover plates as required. Furthermore, it is the responsibility of the Electrical Contractor, in coordination with the Kitchen Equipment Contractor, to make final interconnections within serving counter interior to junction boxes, outlets, switches, controls, etc. for equipment indicated, if required.

1.40 NOT USED

1.41 HOT FOOD SECTION

- A. Top #14 gauge polished S.S. integral and continuous with counter and top, provided with 12" x 20" openings as shown.
- B. Each opening to have #14 gauge S.S. well measuring approximately 6-1/2" deep. Where top is flanged down into well, fitted with a breaker strip on 4 sides of opening. When and where food wells are used with drains, all drains are to be interpipied with 1-1/2" C.P. or S.S. piping by Kitchen Equipment Contractor, and extended to common point near floor drain for Plumbing Contractor to make indirect waste connections. Kitchen Equipment Contractor to furnish and install C.P. or S.S. shut-off valve extending for easy access.
- C. Each well heated as hereinafter specified, dry-moist type electric heater with individual thermostatic control and pilot light. Thermostat dials and pilot lights attached on attendant's side recessed into a panel installed inside of plate shelf areas or apron mounted as shown. All electric food wells connected to a common heavy toggle switch. Wiring concealed.
- D. Food wells to have bottom of housing fitted with sectional removable #16 gauge G.I. bottoms for access to wiring and elements. Counter base under hot food section to be lined with #18 gauge S.S.
- E. Each hot food section provided with the following #20 gauge Polar Ware Classic Anti-Jam inserts and covers: two S12104 pans with two 1/2 size lift-off covers and provide one dome-

type 12" x 20" lift-off cover for each opening; two S12106 pans, three S12066 pans, four S20124 pans; four S12102 pans, four S20122 pans.

1.42 NOT USED

1.43 NOT USED

1.44 NOT USED

1.45 NOT USED

1.46 NOT USED

1.47 COUNTER AND CABINETS WITH SEMI-ENCLOSED BASE

- A. Top of #14 gauge polished S.S. finished 1/2" above working level with 2" diameter 180° roll, bullnosed corners on all exposed sides. Where adjacent to wall, top carried up approximately 6" (or as specified hereinafter and shown) and returned 1" at top and ends towards wall with corners welded forming a continuous unit. Top fastened to cabinet by means of welded and concealed studs.
- B. Cabinet below top to have #18 gauge S.S. enclosure. Front stiles of cabinet channel shaped. This channel fully enclosed inside of cabinet. Top reinforced by means of horizontal framework of S.S. 1-1/2" x 1-1/2" x 1/8" angle with cross braces not more than 18" on center. Framework of all welded construction and intermediate shelves in cabinet of #16 gauge S.S. turned up on all sides to eliminate crevices at shelf surface. Front edge of shelf channel shaped. Shelf surface reinforced by means of #16 gauge S.S. channel stiffeners spaced on not more than 24" on center. Mounted on 6" S.S. adjustable legs, or as hereinbefore shown and specified.

1.48 NOT USED

1.49 DOORS

- A. Whether sliding or hinged type, not less than 1/2" thick overall, double paneled having 3/8" sound-deadening material between #16 gauge S.S. front and #18 gauge S.S. back, reinforced between panels by wide channels, running height of door and made of same material. Panels jointed with continuous welding. Doors and vent openings to have back panel boxed around vent opening and welded to front panel. Doors dust proof and entire front face without seams or joints.
- B. Sliding doors mounted on ball bearing type rollers, sliding in dust proof #14 gauge S.S. tracks overhead, fastened so as to eliminate vibration and jarring when doors are rolled. Doors fitted with limit stops. Bottom guide of #14 gauge S.S. for doors, open and flat, lining up with lower shelf of cabinet - slots so arranged that crumbs or dirt accumulating in the cabinet will drop to



the floor when cabinet is cleaned. Recessed handles solid material, not stamped, of S.S. welded to front panel. Finger grips of ample depth to comfortably pull the door. Doors provided with keyed-alike S.S. faced cylinder locks, built-in flush.

- C. Hinged type doors flush fitting, unless otherwise specified, resting tightly against rabbetted frame. Hinged doors provided with Klein Model #Y-48 (or approved equal) keyed-alike S.S. faced cylinder locks with Model #12230-SM (or approved equal) handles. In case of pair of doors, each individually controlled as outlined and is to close against rubber bumpers.
- D. Outer edges smooth, free from burrs, projections and fins. Excess welded metal removed by precision grinding and polishing.

#### 1.50 REFRIGERATORS AND REFRIGERATION UNITS

- A. Reach-in refrigerators, freezers, and refrigerated units, as shown unless otherwise specified, furnished by Kitchen Equipment Contractor. They shall meet all requirements as set forth for individual item number and complete with self-contained or remote compressors and motors. Cooling coils blower type, unless otherwise called for, provided with initial charge of approved CFC free refrigerant. Plumbing Contractor responsible for extending refrigerator drain line, where required, to spill into adjacent floor drain in approved manner. Extended drain line not less than 3/4" I.D. and C.P. or S.S. tubing.
- B. All refrigerated equipment, refrigerators and freezers, whether walk-in or reach-in, started and adjusted to maintain required temperatures, charged with approved refrigerant as required.
- C. All reach-in refrigerators, freezers, hot food warmers, etc., to have keyed-alike locks. Kitchen Equipment Contractor must request this at time of placing order to avoid correction at a later date at Kitchen Equipment Contractor's expense.
- D. Kitchen Equipment Contractor to provide 1 year's free service for all types of refrigerators and refrigeration equipment. Service to include all compressors, unit coolers, controls, etc., to include adjustments and repairs, irrespective of cause, whether mechanical, operational or manufacturing at no additional cost to Owner. Additionally, five (5) year warranty provided on all compressors, parts only or replacement.

#### 1.51 NOT USED

#### 1.52 MILLWORK EQUIPMENT

- A. General Description: Woodwork to be minimum 3/4" marine grade plywood throughout. Woodwork counters shall be constructed to support the full weight of operating appliances without any deflection of the counter top. Where cut-outs are required in counter tops, appropriate framing needs to be provided around the cut-out to fully support the top in level position.

All miter joints shall be tight with no gaps or open spaces. Filling of miter joints with crack filler prior to finishing is not acceptable. Loose joints shall be hairline, flat, in single plane,

with no exposed screws, nails or other fasteners. All dimensions, reveals and joints shall be held exact.

All fixtures shall be assembled in single and complete units as the dimensions will permit shipment to and installation at the building. Large pieces requiring sections construction shall have their parts accurately fitted and aligned with each other, and provided with ample screws, glue and bolt blocks, tongues, grooves and splines, dowels, mortises and tenons, screws, bolts or suitable means of concealed fastening, as required to render the work of substantial, rigid and permanently secured in proper position.

Sufficient additional material shall be allowed to permit accurate scribing to walls, floors and related work, and due allowance made wherever possible for such shrinkage as may develop after installation. Single and sectional units shall be provided with adequate cleating, blocking, crating and other forms of protection as required to prevent damage, soiling and deterioration during transit, delivery, storage and handling.

Framing and blocking members shall be assembled with bolted and screwed connection and should be secured to the structural backing with cinch, expansion screws or toggle bolts, as required; spaced and installed to ensure ample strength and rigidity. Rails and stiles shall be mortised and tenoned, work neatly mitered and membered, all butt joints made flush and smooth, and all permanent joints made up with water resistant glue. All fixtures shall be assembled without face screws or nails, except where it may be necessary to attach trim items. All face screws or nails that are necessary shall be countersunk and plastic wood or wood plugs used to cover head and the plug neatly touched up. The heads of all screws used in any assembly shall be countersunk below the surface.

- B. Joints: Mortise and tenon, spline, dowel and/or pin block and glue work to avoid use of nails wherever practical. Make butt joints with an approved device of prevention of separation of members. Blind nail and conceal.
- C. Plastic Laminate (HDPL): Plastic laminate shall be bonded to all exposed surfaces with contact cement fast bond #30, as manufactured by 3-M Products Company, or equal, to minimum 3/4" fir faced plywood applied under high pressure. Reject plastic laminate or plastic backing shall be used to prevent warping, unless otherwise specified. All edges shall be carefully sanded to smooth finish, removing burns, nicks and cut marks.
  - 1. Plastic laminate joints shall be finished without wavy and unsightly joints. Joints need not be mitered except if specified. Hand sand edges to a slight chamfer.
- D. Doors, Hinged: Hinged doors shall be fabricated of 3/4" thick plywood with plywood full perimeter edging with plastic laminate on face and self-edging on exposed sides. Door hinges, pulls and catches shall be supplied and installed as detailed. All doors to have minimum of 3 concealed, heavy duty, European hinges per section.
  - 1. Provide S.S. channel trim on the perimeter of the door to guard plastic laminate from chipping.
- E. Doors, Sliding: Sliding doors shall be fabricated of solid core plywood with hardwood edges and constructed similar to hinged doors. Doors shall be mounted on E-Z Glides track. Doors shall be removable without the use of tools. Rubber stops shall be provided concealed in end stile or mullion.

- F. Doors, Tambour Sliding: Tambour sliding doors shall be fabricated of individual hardwood slats, 3/8" by 3/4" round on 2 edges and glued to 20 ounce duck canvas or reject elastic vinyl plastic or equal and shall be provided with hardwood end stile with integral door pull. Track shall be lined with laminated plastic or equally smooth surface and guides at top and bottom shall be fabricated hardwood. Provide lock-pin for sliding doors.
- G. Access Panels/Louver Panels:
1. Access Panels: Shall be fabricated of 3/4" thick marine grade plywood and shall be fabricated to be removable for access. Each access panel shall be provided with 2 magnetic catches at top and (2) 3/16" positioning pins at bottom (unless otherwise specified or detailed on drawings).
  2. Louvered Panels: Are required in woodwork at all locations where proper ventilation is necessary for the efficient performance and operation (exhaust and/or supply) of the food service equipment compressor.  
Types (when specified):
    - a. Louvered panel spaced to conceal equipment yet provide adequate ventilation.
    - b. Kitchen Equipment Contractor to coordinate size, quantity and location of louvered opening for sufficient ventilation of food service equipment. Refer to drawing details for cut-outs and spacing.
  3. Unless otherwise directed, panels shall be powder coated to match laminate selection.
- H. Louvered Doors: Must have concealed hardware to resemble access panels. Doors to have nylon roller friction type heavy duty catch and heavy duty concealed S.S. adjustable hinge.
1. Plastic laminate fronts: provide kiln dried pine shutter type slats. Wood to be free of knots with smooth grain, epoxy painted to match laminate selection. No raw wood surfaces will be acceptable. Paint or laminate as needed between slats.
  2. Slats to be fixed, positioned to conceal equipment from sight.
  3. Provide black color screening/mesh on rear of door with protective edges to prevent tearing.
- I. Drawers: Drawers shall have dovetail construction, well glued and blocked. Fronts shall be not less than 3/4" thick marine grade plywood. Sides and back shall be 1/2" thick fabricated of Birch, Maple or Sycamore except where extension slides are used, in which case the side shall be 5/8" thick. Bottom shall be milled into fronts and sides. Drawers shall be provided with suitable stops. Provide pulls as detailed or specified.
1. The inside surfaces of all drawers shall receive one coat of Penetrating Primer and one coat of glass lacquer.
- J. Painted Finishes: Painted finishes shall have exposed surfaces free from defects and blemishes that would show after being finished, regardless of grade specific. All surfaces specified to receive paint or enamel finish shall receive one crosscoat of lacquer type undercoat. The undercoat shall be of appreciable different color than that of the finish coat, and of proper ground color with relation to the finish coat. After the undercoat has been thoroughly dried, surfaces shall be sanded smooth and two coats of enamel shall be applied. Back painting shall be provided for all cabinet and woodwork prior to installation.
- K. Interior and Wall Shelves: Cabinet interiors and wall shelves shall be laminated as specified under Section C, Plastic Laminate.
- L. Granite Tops:

1. Size, shape and installed where shown on drawings. These are fabricated items and are to be constructed as per manufacturer's requirements and as further detailed on contract drawings.
2. Color and finish shall be selected by the Architect, and physical properties shall confirm to manufacturer's standard specifications for foodservice application. The material shall be homogenous; and not of a composite construction.
3. Granite shall be 3/4" thick with 1-1/4" face for counter tops unless otherwise specified.
4. Angle frame under top sheathed with sound deadening material.
5. General installed to conform to manufacturers standard details in order to maintain product warranty, i.e. cut outs for drop-in equipment.

M. Solid Surface:

1. Size, shape and installed where shown on drawings. These are fabricated items and are to be constructed as per manufacturer's requirements and as further detailed on contract drawings.
2. Color and finish shall be selected by the Architect, and physical properties shall confirm to manufacturer's standard specifications for foodservice application. The material shall be homogenous; and not of a composite construction.
3. Solid Surface to be minimum 1/2" thick silicone mounted to 3/4" thick grade plywood if required as per manufacturer's recommendations.
4. Top secured to counter construction by means of concealed S.S. studs, nuts and washers.
5. Angle frame under top sheathed with sound deadening material.
6. General installed to conform to manufacturers standard details in order to maintain product warranty, i.e. cut outs for drop-in equipment.

## PART 2 - PRODUCTS

### ITEM #1 REACH-IN FREEZER – QTY. AS PER PLAN & SCHEDULE

Utility Model F-50-SS-2S-N. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-20P
- Verify door hinging
- Exterior Finish: Stainless Steel
- Interior Finish: Stainless Steel
- 1 ea. Self-contained refrigeration
- 1 ea. Shallow depth design
- 1 ea. Narrow width design
- 2 ea. Full doors with locks
- 3 ea. Stainless steel shelves per compartment, top/bottom section
- 1 ea. Thermal expansion valve
- 1 ea. Receiver tank with service valves
- 1 ea. Sight glass
- 1 ea. Filter drier
- 1 ea. Low pressure cutout
- 1 ea. Digital temperature control system
- 1 ea. Three year parts warranty
- 1 ea. Three year labor warranty

- Mounted on heavy duty casters, front two with brakes

Or as manufactured by Traulsen or Victory.

ITEM #2 SPARE NUMBER

ITEM #3 SPARE NUMBER

ITEM #4 DRYING RACK, PORTABLE – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model QDR-2436E-GL. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- 4 ea. 24" x 36" Shelves with removable, vented inserts
- 4 ea. 74" High uprights
- 2 ea. Tray drying rack, full shelf
- 1 ea. Drop-in tray drying rack, full shelf
- 1 ea. 24" x 36" Bottom shelf with removable, solid inserts
- Mounted on heavy duty casters, front two with brakes

Or as manufactured by Focus or Metro.

ITEM #5 3-COMPARTMENT, POTWASH – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model SDTPL-96-14/3. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Counter Top Material: Stainless Steel, 14 Gauge
- 1 ea. Table end connection to Item #9, Warewasher
- 3 ea. Built-in work sinks, 20" L x 16" W x 14" D
- 3 ea. Waste valve with lever
- 3 ea. Tail piece
- 3 ea. Waste overflow
- 1 ea. Stainless steel pre-rinse assembly with 12" swing spout add-on faucet and wrist action handles, 1/2" connections
- Flanged feet bolted to floor

Or as manufactured by Aero Mfg. or IMC/ Teddy.

ITEM #6 S.S. RACK GUIDE, REMOV. – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model Custom. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- 1 ea. Removable rack guide to fit over sink, Stainless Steel, 12 Gauge

- 1 ea. Integral bracket, undercounter, to hold when not in use

Or as manufactured by Aero Mfg. or IMC/ Teddy.

ITEM #7 SPARE NUMBER

ITEM #8 STORAGE SYSTEM, WALL MNTD. – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model WAL-STOR. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Mounting Height: 50" above finished floor
- 2 ea. Wall grid/mat, WM1848-E, stacked
- 1 ea. Wall uprights, vertical, PR45VU-E
- 2 ea. Shelf, 1448-E
- 2 ea. Shelf Brackets, PR14B-E
- 1 ea. Grid Shelf, 1436WGS-E
- 2 ea. Baskets, WB-E
- 12 ea. Utility Hooks, UH-E
- 1 ea. Epoxy coated finish, entire wall system
- Wall backing by General Contractor

Or as manufactured by Focus or Metro.

ITEM #9 WAREWASHER, DOOR TYPE, VENTLESS – QTY. AS PER PLAN & SCHEDULE

Hobart Model AM15VLT-2. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 208/3, Hardwired
- 1 ea. Single point electrical connection
- 1 ea. Straight-thru design application
- 1 ea. Pressure regulator
- 3 ea. Peg racks
- 3 ea. Combination racks
- 3 ea. Vollrath Traex sheet pan racks, TR23
- 1 ea. Built-in hot water booster, 70° rise
- 1 ea. Detergent/rinse aid pumps
- 1 ea. Drain tempering kit
- 1 ea. Water hammer arrestor kit
- 1 ea. Ventless exhaust type
- 1 ea. Tall chamber
- Flanged feet bolted to floor

Or as manufactured by Champion or Meiko.

ITEM #10 CLEAN DISH TABLE – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model CDTR-60-14/3. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Counter Top Material: Stainless Steel, 14 Gauge
- Stainless steel tubular crossrails, side / rear

Or as manufactured by Aero Mfg. or IMC/ Teddy.

ITEM #11 TRASH RECEPTACLE, SLIM JIM – QTY. AS PER PLAN & SCHEDULE

Rubbermaid Model 1971258. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- 1 ea. 16 Gallon capacity
- 1 ea. Portable dolly

Or approved equal.

ITEM #12 HAND SINK, WALL MOUNT – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model HSAN-10-F-LRS. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- 1 ea. Soap dispenser, wall mounted
- 1 ea. Towel dispenser, wall mounted
- 1 ea. Left and right splash guards
- Wall backing by General Contractor

Or as manufactured by Aero Mfg. or IMC/ Teddy.

ITEM #13 WORK TABLE – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model T3096SEB-BS. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Counter Top Material: Stainless Steel, 14 Gauge
- 2 ea. Work drawer assembly with removable cutting board
- Stainless steel undershelf, removable
- Stainless steel legs, 6" adjustable

Or as manufactured by Aero Mfg. or IMC/ Teddy.

ITEM #14 SPARE NUMBER

ITEM #15 WORK DRAWER(S), BUILT-IN – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model 502943. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Included as part of Item #13, Work Table
- Stainless steel integrated handles, horizontal orientation
- 1 ea. Self-closing drawer
- 1 ea. Drawer safety stop
- 1 ea. Stainless steel pan insert, full size removable

Or as manufactured by Aero Mfg. or IMC/ Teddy.

ITEM #16 FOOD CUTTER/ CHOPPER – QTY. AS PER PLAN & SCHEDULE

Robot Coupe Model R2N. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P
- 1 ea. Disc Package, SP5DISC

Or as manufactured by Piper Products or Electrolux.

ITEM #17 CAN OPENER, ELECTRIC – QTY. AS PER PLAN & SCHEDULE

Edlund Model 270C. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P

Or approved equal.

ITEM #18 OVERSHELF, TABLE MNTD. – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model OS1296-16/3. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Mounting height: 56" above finished floor
- Posts support bracket thru counter top, welded to frame

Or as manufactured by Aero Mfg. or IMC/ Teddy.

ITEM #19 STAND, EQUIPMENT – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model MMT3030S. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:



- 1 ea. Pan rack slide base, 3" on center

Or as manufactured by Aero Mfg. or IMC/ Teddy.

ITEM #20 SLICER, FOOD – QTY. AS PER PLAN & SCHEDULE

Berkel Model X13AE-PLUS. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P
- 1 ea. Automatic type
- 1 ea. Lift device

Or as manufactured by Hobart or Globe.

ITEM #21 SPARE NUMBER

ITEM #22 STAND, EQUIPMENT – QTY. AS PER PLAN & SCHEDULE

Existing to be reused. Unit to be installed where shown on drawings. This is an existing item and is to be handled as described in General Specifications. Provided with all features, options and accessories, per quantity required, as indicated:

- No additional features, options or accessories required

ITEM #23 MIXER, COUNTER – QTY. AS PER PLAN & SCHEDULE

Existing to be reused. Hobart Model HL200. Unit to be installed where shown on drawings. This is an existing item and is to be handled as described in General Specifications. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P
- All utility requirements to be verified by K.E.C.

ITEM #24 WORK TABLE – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model T3096SEB-BS. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Counter Top Material: Stainless Steel, 14 Gauge
- 1 ea. Work drawer assembly with removable cutting board
- Stainless steel undershelf, removable
- Stainless steel legs, 6" adjustable

Or as manufactured by Aero Mfg. or IMC/ Teddy.

**ITEM #25      WORK SINK, WELDED-IN – QTY. AS PER PLAN & SCHEDULE**

Eagle Group/Metal Masters Model FDI-14-16-9.5-2. Size, shape and installed where shown on drawing. This is a fabricated item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Included as part of Item #24, Work Table
- 1 ea. Built-in work sinks, 16" L x 14" W x 9.5" D
- 2 ea. Waste valve with lever
- 2 ea. Tail piece
- 2 ea. Waste overflow
- 1 ea. Stainless steel faucet with 12" swing spout and wrist action handles, 1/2" connections

Or as manufactured by Aero Mfg. or IMC/ Teddy.

**ITEM #26      WORK DRAWER(S), BUILT-IN – QTY. AS PER PLAN & SCHEDULE**

Eagle Group/Metal Masters Model 502943. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Included as part of Item #24, Work Table
- Stainless steel integrated handles, horizontal orientation
- 1 ea. Self-closing drawer
- 1 ea. Drawer safety stop
- 1 ea. Stainless steel pan insert, full size removable

Or as manufactured by Aero Mfg. or IMC/ Teddy.

**ITEM #27      OVERSHELF, TABLE MNTD. – QTY. AS PER PLAN & SCHEDULE**

Eagle Group/Metal Masters Model OS1296-16/3. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Mounting height: 56" above finished floor
- Posts support bracket thru counter top, welded to frame

Or as manufactured by Aero Mfg. or IMC/ Teddy.

**ITEM #28      SPARE NUMBER****ITEM #29      STORAGE SHELVING – QTY. AS PER PLAN & SCHEDULE**

Eagle Group/Metal Masters Model QPF-1842E-GL. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Shelving to be sized to fit
- 4 ea. 18" x 42" Shelves with removable, vented inserts
- 4 ea. 74" High uprights
- Mounted on heavy-duty casters, front two with brakes

Or as manufactured by Focus or Metro.

ITEM #30      WORK STATION, MODULAR – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model MD2436. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- 1 ea. Stainless steel finish, entire wall
- 1 ea. Stainless keyboard drawer
- 2 ea. Book holder, BH-1
- 3 ea. Plastic bin holder, PBH
- 2 ea. Hanging file holder, HFH
- 1 ea. Wire basket, WB
- 1 ea. Stainless steel drawer, 500772

Or as manufactured by Focus or Metro.

ITEM #31      HAND SINK, WALL MOUNT – QTY. AS PER PLAN & SCHEDULE

Eagle Group/Metal Masters Model HSAN-10-F-LRS. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- 1 ea. Soap dispenser, wall mounted
- 1 ea. Towel dispenser, wall mounted
- 1 ea. Left and right splash guards
- Wall backing by General Contractor

Or as manufactured by Aero Mfg. or IMC/ Teddy.

ITEM #32      EXHAUST HOOD, CONTROL PANEL – QTY. AS PER PLAN & SCHEDULE

Captive Aire Model Custom. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Included as part of Item #40, Exhaust Hood

Or as manufactured by Caddy or Accurex.

ITEM #33      FIRE PROTECTION SYSTEM – QTY. AS PER PLAN & SCHEDULE

Captive Aire Model UL-300 (R-102). Unit to be installed where shown on drawing in strict accordance to that described in General Specifications. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, Hardwired
- Provide connection to building Fire Alarm System
- 1 ea. Mechanical Gas valve, up to 3", size to be verified
  - Provide add/ alternate for electric gas valve
- 1 ea. Reset Relay Push Button
  - Only required with use of electric gas valve
- For the protection of equipment beneath Exhaust Hood, Item #40

Or as manufactured by Caddy or Accurex.

ITEM #34 CABINET, MOBILE, WARM/ HOLD – QTY. AS PER PLAN & SCHEDULE

Existing to be reused. Vulcan Model VBP15. Unit to be installed where shown on drawings. This is an existing item and is to be handled as described in General Specifications. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P
- All utility requirements to be verified by K.E.C.

ITEM #35 SPARE NUMBER

ITEM #36 STEAMER, ATMOSPHERIC, CONNECTED – QTY. AS PER PLAN & SCHEDULE

Accutemp Model N61201E060 SGL. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P
- Gas: 1/2" Rear Connection, 60 MBtuh
- Verify door hinging
- 1 ea. Manifold gas line for double unit
- 1 ea. Pressure regulator
- 1 ea. 48" Quick disconnect with flexible hose
- 1 ea. Restraint cable
- 1 ea. Stainless steel stand with casters
- No filtration required

Or as manufactured by Cleveland or Groen.

ITEM #37 RANGE, RESTAURANT, ELECTRIC – QTY. AS PER PLAN & SCHEDULE

Existing to be reused. Unit to be installed where shown on drawings. This is an existing item and is to be handled as described in General Specifications. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 208/1, Hardwired
- All utility requirements to be verified by K.E.C.

ITEM #38 OVEN, CONVECTION, GAS – QTY. AS PER PLAN & SCHEDULE

Moffat Model G32D5-2C. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: (2)120/1, NEMA 5-15P
- Gas: 1/2" Rear Connection, 66 MBtuh
- 1 ea. Manifold gas line for double unit
- 1 ea. Pressure regulator
- 2 ea. Core temperature probe kit
- 2 ea. Extra oven racks
- 1 ea. 48" Quick disconnect with flexible hose
- 1 ea. Restraint cable
- Mounted on heavy duty adjustable casters, front two with brakes

Or approved equal.

ITEM #39 S.S. WALL PANEL(S) – QTY. AS PER PLAN & SCHEDULE

Captive Aire Model Custom. Size, shape and installed where shown on drawing. This is a fabricated item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Stainless steel panels, evenly sized, 20 Gauge
- Installed from top of coved base to underside of hood, entire length
- Hairline joints sealed with S.S. trim strips
- Secured to wall with heat resistant mastic

It is the responsibility of the Kitchen Equipment Contractor to coordinate and make all appropriate cut-outs in paneling based on utility requirements in this location and apply appropriate stainless steel trim strips, caps, gussets, etc...

Or as manufactured by Caddy or Accurex.

ITEM #40 EXHAUST HOOD, TYPE I – QTY. AS PER PLAN & SCHEDULE

Captive Aire Model Custom. Size, shape and installed where shown on drawing. This is a fabricated item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Construction: 100% 304 stainless steel
- Filters: Stainless steel captrate solo with hook
- Insulation: Integral air / insulation barriers at perimeter and top, 0" clearance to combustibles
- Structural front panel, insulated

- Wall / Island canopy hood, length / size as per contract documents
- 1 ea. Front perforated supply plenum (PSP) with built-in 3" back standoff
- Insulation for PSP housing, as required
- 4 ea. LED lights with bulbs
- Stainless steel field wrap, approximately 18" high on all exposed sides
- Adjustable exhaust air volume control damper
- 1 ea. Exhaust Fan, EF-1 (installed by General Contractor):
  - Refer to Contract Drawings
- 1 ea. Supply Fan, MUA-1 (installed by General Contractor):
  - Refer to Contract Drawings
- Hood Control Panel Package:
  - EMSplus11 modulating energy management system with smart controls
  - Built-in VFDs
  - Duct Temperature Sensors in all risers
  - Room Temperature Sensor
  - Configurable through Touch Screen Interface
  - EMS Duct Thermostat
  - INVERTER DUTY THREE PHASE MOTORS REQUIRED

Or as manufactured by Caddy or Accurex.

ITEM #41 REFRIGERATOR, REACH-IN – QTY. AS PER PLAN & SCHEDULE

Existing to be reused. Turbo Air Model MSR-49NM. Unit to be installed where shown on drawings. This is an existing item and is to be handled as described in General Specifications. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P
- All utility requirements to be verified by K.E.C.

ITEM #42 SPARE NUMBER

ITEM #43 REFRIGERATOR, REACH-IN – QTY. AS PER PLAN & SCHEDULE

Existing to be reused. Turbo Air Model MSR-49NM. Unit to be installed where shown on drawings. This is an existing item and is to be handled as described in General Specifications. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P
- All utility requirements to be verified by K.E.C.

ITEM #44 FIRE EXTINGUISHER, WALL MTND. – QTY. AS PER PLAN & SCHEDULE

Captive Aire Model K-CLASS. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- 1 ea. Wet chemical type, Ansulex low pH agent
- 1 ea. 2.5 Gallon tank

- 1 ea. Wall bracket
- 1 ea. Rechargeable
- Wall backing by General Contractor

Or as manufactured by Caddy or Accurex.

ITEM #45 REFRIGERATED, SELF-SERVICE CASE – QTY. AS PER PLAN & SCHEDULE

Structural Concepts Model NR3647RSSV. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 208/1, NEMA 6-20P
- Exterior Panel Finish: Stainless steel
- Exterior Finish: Stainless steel
- Interior Finish: Stainless steel
- 1 ea. Free standing style application
- 1 ea. Self-contained refrigeration:
  - Rear access, Breeze™ with Energy Wise
- 1 ea. Rear loading access doors, clear glass
- 1 ea. Rear door lock
- 1 ea. Interior LED lighting per shelf
- 1 ea. Retractable night curtain, locking
- 1 ea. Glass end panels
- 1 ea. Rear vented panel, stainless steel

Or as manufactured by Federal Industries or RPI.

ITEM #46 SERVING COUNTER – QTY. AS PER PLAN & SCHEDULE

LTI Model Custom. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Counter Components: Outlets/Junction boxes for drop-in or built-in equipment mounted in counter by K.E.C., wired by E.C.
- Counter Construction: 1" Stainless steel square tubing fully welded with integral chase wall
- Counter Top Material: Stainless Steel, 14 Gauge
- Front Panels: WilsonArt, Premium Collection, as selected by Architect
- End Panels: WilsonArt, Premium Collection, as selected by Architect
- Working Side:
  - Stainless steel interior/exterior
  - Counter/Door to be flush frame design
  - Stainless steel integrated handles, horizontal orientation
  - Cylinder locks, keyed alike, as required
  - Intermediate stainless steel solid shelves, adjustable
  - Stainless steel apron to mount switches, controls, etc.
- Counter Heights: 32" Counter Top

- Counter Base: Stainless steel legs, 6" adjustable with 16 GA removable kick plate, tapered cove

Or as manufactured by Aero Mfg. or Eagle Group/Metal Masters.

ITEM #47 DROP-IN, HOT WELLS – QTY. AS PER PLAN & SCHEDULE

LTI Model TW-DW-4. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 208/1, Hardwired
- 1 ea. Wet or dry application
- 1 ea. Controls remote mounted in apron
- 1 ea. Flange style, hugged edge
- 1 ea. Manifolder drain lines to gate/shut-off valve
- Adaptor bars to hold combination of 1/1, 1/2, 1/3 and 1/6 sized pans

Or as manufactured by Delfield or Piper Products.

ITEM #48 FOOD PROTECTOR(S), ADJUSTABLE – QTY. AS PER PLAN & SCHEDULE

Hudson Model PCA-P. Size, shape and installed where shown on drawing. This is a fabricated item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, Hardwired
- Gearless adjustment brackets
- LED Strip lights mounted to posts, concealed wiring
- LED Light mounting clips for extended lengths, as required
- 1" Tubular stainless steel posts
- Anchored below to counter frame for rigidity
- Stainless steel sleeve post extends thru counter top
- 3/8" Tempered glass, horizontal/vertical surfaces

Or as manufactured by Piper Products or Premier.

ITEM #49 SPARE NUMBER

ITEM #50 DROP-IN, COLD WELL – QTY. AS PER PLAN & SCHEDULE

LTI Model DI-2037TA-H. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P
- Verify compressor air flow orientation
- 1 ea. Self-contained refrigeration
- 1 ea. Controls remote mounted in apron
- 1 ea. Flange style, hugged edge



- 1 ea. Flush food pan presentation
- 1 ea. Manifoldded drain lines to gate/shut-off valve
- 1 ea. Removable false bottom
- Adaptor bars to hold combination of 1/1, 1/2, 1/3 and 1/6 sized pans

Or as manufactured by Delfield or Piper Products.

**ITEM #51      FOOD PROTECTOR(S), ADJUSTABLE – QTY. AS PER PLAN & SCHEDULE**

Hudson Model PCA-P. Size, shape and installed where shown on drawing. This is a fabricated item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, Hardwired
- Gearless adjustment brackets
- LED Strip lights mounted to posts, concealed wiring
- LED Light mounting clips for extended lengths, as required
- 1" Tubular stainless steel posts
- Anchored below to counter frame for rigidity
- Stainless steel sleeve post extends thru counter top
- 3/8" Tempered glass, horizontal/vertical surfaces

Or as manufactured by Piper Products or Premier.

**ITEM #52      DROP-IN, ICE CREAM DISPENSER – QTY. AS PER PLAN & SCHEDULE**

LTI Model DI-2222-IC. Unit to be installed where shown on drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Electrical: 120/1, NEMA 5-15P
- 1 ea. Self-contained refrigeration
- 1 ea. Easy lift, see-thru lid
- 1 ea. Ventilation louvers for base
- 2 ea. Coated baskets

Or as manufactured by Delfield or Piper Products.

**ITEM #53      CONDIMENT COUNTER, PORTABLE – QTY. AS PER PLAN & SCHEDULE**

LTI Model Custom. Size, shape and installed where shown on drawing. This is a fabricated Item and is to be constructed as described in General Specifications and as further detailed on contract drawings. Provided with all features, options and accessories, per quantity required, as indicated:

- Counter Construction: 1" Stainless steel square tubing fully welded
- Counter Top Material: Stainless Steel, 14 Gauge
- Tray Slide: Solid, 4-ribbed style
- Plate/Tray Shelf:

- Front Panels: WilsonArt, Premium Collection, as selected by Architect
- End Panels: WilsonArt, Premium Collection, as selected by Architect
- Cabinet Base:
  - Millwork door panels, (3) concealed hinges per door
  - Routed finger pull with magnetic touch latch
  - Stainless steel wire handles
  - Cylinder locks, keyed alike, as required
  - Stainless steel interior finish with adjustable shelves
- Counter Heights: 32" Counter Top
- Counter Base: Mounted on heavy duty casters, front two with brakes

Or as manufactured by Aero Mfg. or Eagle Group/Metal Masters.

### PART 3 - EXECUTION

#### 3.1 GENERAL RELATED CONDITIONS

- A. In each item of equipment hereinafter specified under the "Equipment Schedule," these specifications shall only identify each respective item by name and number, as well as list various component parts provided for same.
- B. Therefore, it shall be intended that these respective items and their component parts shall be of material (mounted where applicable) constructed and furnished in strict accordance to that described in the general specifications for these items and integrally constructed where applicable.
- C. It shall also be intended that where buy-out (pre-fabricated) items are specified, same shall be definitely furnished with all the accessories as normally furnished by manufacturer for these items. Also in strict accordance with current manufacturer's engineering data sheet for each respective item.

#### 3.2 SPECIAL NOTES

- A. It shall be the responsibility of Kitchen Equipment Contractor to keep up to date with progress made in field on installation of all necessary roughing to adequately and properly operate and accommodate all equipment furnished by Kitchen Equipment Contractor and as shown on drawings, to make as many visits to the job site as is necessary to check and assure that all roughing is being properly installed to accommodate this equipment. Include this service in bid.
- B. Kitchen Equipment Contractor to cooperate with all trades so that the end results of his work will be a satisfactory, approved and accepted installation. Written reports of each visit shall be sent promptly to the Architect and the Food Service Consultant.

#### 3.3 COORDINATION

- A. Procedure of construction is of paramount importance in executions of this project. Kitchen Equipment Contractor to carry on his work so that no delay in his operations or those of any other contractors occurs at any time.

- B. Kitchen Equipment Contractor to verify with Architect as to opening date of the food service area, and schedule his fabrication and purchasing of equipment so that all will be in readiness, installed, connected, tested, demonstrated, etc., in ample time prior to the scheduled opening date.

### 3.4 DELIVERY AND INSTALLATION

- A. Shall mean and intend that Kitchen Equipment Contractor shall deliver and assemble all equipment of contract in 1 piece in required locations in building, ready for water, waste, gas, electric and ventilating connections required by other contractors. Any pieces of equipment may be delivered sectionally, but all working surfaces butt-welded, ground and polished on premises so that upon completion, such item of equipment will have true, smooth, even and continuous surfaces. Butt joining and filling with solder not permitted. Kitchen Equipment Contractor must verify door sizes, delivery platform, elevator size, etc., effecting delivery to food service areas for all items of equipment.

### 3.5 RESERVATIONS AND CONDITIONS

- A. It is the intent of this specification to complete the installation of all equipment covered herein in all phases ready for operation. Contractor shall carefully examine the plans and specifications for building construction contracts and determine therefrom the extent of his operations in all respects. All labor and materials not included in building construction contracts necessary to accomplish this intent are hereby included in this contract.
- B. Kitchen Equipment Contractor shall attend job meetings when required for purpose of coordinating his work with other trades.
- C. All equipment shall be received at the building fully protected. It will be the responsibility of the Kitchen Equipment Contractor to protect the equipment until completely installed and accepted.

### 3.6 EXISTING EQUIPMENT (RELOCATED AND/OR REINSTALLED)

- A. Prior to submission of bid for equipment listed in Schedule of Equipment, Kitchen Equipment Contractor shall visit the existing facilities and associated areas to survey all existing equipment intended to be reused (or not used) to determine the extent of his/her work.
- B. Kitchen Equipment Contractor responsible for verifying all reusable equipment's sizing, utility and mechanical requirements, prior to release of any custom fabrication or equipment associated with it. Additionally, all makes, models, etc...of said equipment to be verified by the Kitchen Equipment Contractor.
- C. Bid shall include the cost of dismantling and moving, all reusable equipment to a temporary storage location designated by the Owner. In the event that the Owner cannot provide temporary storage, the Kitchen Equipment Contractor shall move all reusable existing equipment to his/her storage facility. When the facility is ready to receive equipment, the Kitchen Equipment Contractor shall deliver and set in place all new equipment, as well as all reusable existing equipment.

- D. Kitchen Equipment Contractor shall submit separate price for the removal from the premises all old, not reused kitchen equipment as identified by Owner and/or contract documents. Disposal of all such equipment shall be at the discretion of Kitchen Equipment Contractor, but shall be removed from the premises immediately when available. If price is not acceptable, the equipment shall remain the property of Owner.
- E. When new areas are completed, Kitchen Equipment Contractor shall locate all new and reusable existing equipment in their respective locations, assemble and set in place, as shown on drawings, left ready for necessary final connections by respective trades. Conditions listed in the specifications under "Delivery and Installation" shall apply to all reusable existing equipment.
- F. Rough-in drawings and all other necessary drawings and information covering the proper installation of all reusable existing equipment shall be submitted by Kitchen Equipment Contractor.
- G. All necessary plumbing, electrical, mechanical, etc...disconnections associated with reusable equipment shall be completed by the respective trades.

END OF SECTION 114000-36

**SECTION 114001: FOODSERVICE EQUIPMENT- WALK-IN COOLERS****PART 1: GENERAL****1.1 SUMMARY**

- A. This Section includes:
  - 1. Walk-In Cooler
- B. See Division 3 Section "Cast-in-Place Concrete" for the following:
  - 1. Equipment bases.

**1.2 SUBMITTALS**

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For fabricated equipment. Include plans, elevations, sections, roughing-in dimensions, fabrication details, utility service requirements, and attachments to other work.
- C. Coordination Drawings: For foodservice facilities.
  - 1. Indicate locations of foodservice equipment and connections to utilities.
  - 2. Key equipment using same designations as indicated on Drawings.
  - 3. Include plans and elevations; clearance requirements for equipment access and maintenance; details of support for equipment; and utility service characteristics.
- D. Samples: For each exposed finish.
- E. Operation and maintenance data.
- F. Product Schedule: For each foodservice equipment item, include the following:
  - 1. Designation indicated on Drawings.
  - 2. Manufacturer's name and model number.
  - 3. List of factory-authorized service agencies including their addresses and telephone numbers.
- G. Special warranty specified in this Section.

**1.3 QUALITY ASSURANCE**

- A. NSF Standards: Provide equipment that bears NSF Certification Mark or UL Classification Mark certifying compliance with applicable NSF/ANSI standards.

- B. UL Certification: Provide electric equipment and components that are evaluated by UL for fire, electric shock, and casualty hazards according to applicable safety standards and that are UL certified for compliance and labeled for intended use.
- C. Regulatory Requirements: Install equipment to comply with the following:
  - 1. ASHRAE 15, "Safety Code for Mechanical Refrigeration."
  - 2. NFPA 70, "National Electrical Code."
- D. Pre-installation Conference: Conduct conference at Project site.

#### **1.4 PROJECT CONDITIONS**

- A. Field Measurements: Indicate measurements on Coordination Drawings.
- B. Coordinate foodservice equipment layout and installation with other work, including lighting fixtures, HVAC equipment, and utility service connections.

#### **1.5 WARRANTY**

- A. Refrigeration Compressor Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace compressors that fail in materials or workmanship within specified warranty period.
  - 1. Failure includes, but is not limited to, inability to maintain set temperature.
  - 2. Minimum Warranty Periods, years from date of Substantial Completion:
    - a. Panels: Ten (10) years.
    - b. Compressor: Five (5) years.
    - c. Service/Workmanship Warranty, including all field brazed joints: Two (2) years.
    - d. Manufacturer's Warranty on all other components: Two (2) years.

### **PART 2: PRODUCTS**

#### **2.1 MANUFACTURERS**

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
  - 1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products specified.
  - 2. Products: Subject to compliance with requirements, provide one of the products specified.
  - 3. Basis-of-Design Product: The design for foodservice equipment item is based on the product named. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.

## 2.2 FABRICATED EQUIPMENT

### A. Materials:

1. Stainless Steel: ASTM A 666, with No. 4 finish (directional satin finish) on exposed surfaces.
2. Galvanized Steel: ASTM A 653/A 653M, G90 coating designation; commercial-quality, cold-rolled steel that is zinc coated by the hot-dip process and chemically treated.

## 2.3 FOODSERVICE EQUIPMENT

### A. Walk-In Cooler:

1. Basis-of-Design Product: "Tafco" 8'-6" height, unit capacity as per plan, complete, including refrigeration unit and compressor, as manufactured by TMP Manufacturing Company, Inc. 1395 Industrial Park Road, Clearfield, PA; Tel: 800-233-1954; [www.tafcowalkins.com](http://www.tafcowalkins.com) ; or a comparable product by one of the following:
  - a. American Panel Corporation, Ocala, FL.
  - b. Bush Refrigeration,
  - c. U.S. Cooler, Quincy, IL.
2. Description: Prefabricated of modular design and construction.
  - a. Panel Fabrication: Foamed-in-place urethane insulation sandwiched between interior and exterior metal "skin" which has been die-formed and gauged for uniformity in size. Edges of panels shall be foamed-in-place tongue and groove with locking facilities foamed-in-place at time of fabrication. 8'-6" height with floor.
  - b. Floor Construction: Floor panels fabricated similarly to other panels, designed to withstand uniformly distributed loads of 700 lbs per square foot. Floor will be recessed.
  - c. Insulation: Each panel shall be filled with rigid "Foamed-In-Place" urethane having a thermal conductivity (K factor) of .133 BTU/hr./ft squared per degrees Fahrenheit/inch and an overall coefficient of heat transfer (U factor) of not more than .03. "R" factor shall be 31 or greater. Insulation shall have a 97% closed cell structure. Overall thickness shall be 4". Fire hazard classification according to ASTM E-84 (UL 723) is a flame spread rating of 25" or less and certified with UL label. Factory Mutual approved and listed.
  - d. Exterior and Interior Wall Panel and Interior Ceiling Panel Finish: Stainless steel, 20 gauge, and type 304, #3 finishes.
  - e. Exterior Ceiling and Exterior Floor Panel Finish: 26 gauge Galvalume steel.
  - f. Interior Floor Finish: .100 treads plate aluminum.
  - g. Panel Locking Assemblies: Assembly of walk-in shall be accomplished by Posi-Locs. Posi-Locs shall be foamed-in-place and activated by a hex wrench provided by the manufacturer. Access ports to locking devices shall be covered by snap caps. Access ports shall be on interior to allow assembly of walk-in from the inside.

- h. Section Gaskets: NSF listed gaskets shall be foamed-in-place to the male side of all panels, on both interior and exterior. Gaskets shall be impervious to stains, greases, oils, mildew, etc.
- i. Entrance door and door panel: Each walk-in shall be fitted with one standard 34" x 78" swing-type entrance door. The door shall be flush type, finished in and out to match the wall in which located. Doors and door section shall be listed by Underwriters Laboratories and equipped with the following:
  - 1) Door shall be equipped with magnetic gasket, Posi-Seal door closure and latch. Hardware has provisions for locking and a safety release which prevents entrapment of personnel within the box.
  - 2) Door shall be self-closing with two strap-types, cam-lift hinges.
  - 3) Door jamb shall be made of Fiberglass Reinforced Plastic. An isolated, low wattage heater strip covered by magnetically attracting stainless steel shall be fitted onto this jamb (freezer only). This strip shall provide perfect sealing of magnetic gasket and prevent frost and condensation build-up.
  - 4) Each entrance door section shall be provided with an incandescent type vapor-proof light, pilot light switch and conduit between switch box and outlet box. Concealed wiring shall be standard on each entrance door section.
  - 5) A threshold with non-skid striping shall be provided with each door section.
  - 6) A 2" dial thermometer shall be included with each door section to indicate inside temperature.
- 3. NSF: All walk-ins shall be fabricated to comply with National Sanitation Foundation No. 7. The NSF label shall be affixed to the interior door pan. All interior corners, including floor shall be coved.
- 4. Air Vent: Tri-Action air vent shall be provided to equalize pressure between the interior and exterior, caused by sudden temperature changes due to door openings and evaporator defrosting. The vent shall be heated to prevent moisture and/or frost accumulation.
- 5. Installation Instructions: A complete set of installation instructions shall be included with the walk-in. These instructions shall cover the erection and assembly of the walk-in, and the installation of refrigeration systems. A floor plan print shall be included.
- 6. Refrigeration Equipment: Type "PR" refrigeration unit with compressor as recommended by cooler manufacturer for use with their cooler. Condensing units shall be fully hermetic or semi-hermetic type. Refrigerant shall be R-22 or R-404A unless otherwise specified. Condenser shall be air-cooled or optional water-cooled. Condensing units shall be factory assembled and UL or ETL listed. Evaporators shall be forced air type. Air discharge shall be parallel to the walk-in ceiling. Fan motors, guards multi-fin and tube-type coil, shall be housed in heavy gauge aluminum. Unit shall have drain pan with suitable drain pipe fitting. Freezer evaporators shall have and automatic electric defrost system including heater, time clock, fan delay control, and heated drain pan. Defrost shall be time initiated and temperature terminated with built-in fail-safe control. All evaporators shall be UL listed. All systems include pump down cycle to provide additional protection against unwanted refrigerant flow. Coordinate electrical requirements with available electrical service and as shown on electrical drawings.
- 7. Refrigeration Accessories:
  - a. Low Ambient Kit: For air-cooled condensing units installed outdoors, include crankcase heater, head pressure control, and rainproof housing.



- b. Drain Lines: Installing contractor shall provide suitable drain lines from all evaporators. Drains shall be trapped outside the walk-in. Freezer drains shall be copper tubing and shall be heated and insulated to prevent freeze-up. All plumbing to be in accordance with local codes. Provide Drain line heater kits from manufacturer.
  - c. Condensate Evaporator: Required if job site does not have a floor drain near the walk-in. An electric condensate evaporator shall be provided for wall mounting on exterior of the walk-in. 115-60-1 AC continuous service voltage required.
  - d. Insulated Evaporator: Top-mounted coil system to be used to provide more useable storage space. Coil to be positioned above interior of ceiling.
8. Options and Accessories: Provide the following:
- a. Three door hinges.
  - b. Digital Thermometer.
  - c. Sweep Gaskets.
  - d. FRP Door Jamb.
  - e. Crown Molding.
  - f. Kick plates.
  - g. Heated Air Vents.
  - h. Air Shield
  - i. Not less than two interior architectural light fixtures.
  - j. Cooler Shelving:
    - 1) 8 - 24" W, 36" L, Stainless-Steel Shelves with #3 finish and antimicrobial protection.
    - 2) 4 - 24" W, 42" L, Stainless-Steel Shelves with #3 finish and antimicrobial protection.
    - 3) 16 - 24" W, 48" L, Stainless-Steel Shelves with #3 finish and antimicrobial protection.
    - 4) 28 - 74" H stainless steel posts with #3 finish and antimicrobial protection.
    - 5) Verify sizes for proper fit.
9. Electrical Service: Coordinate electrical requirements with electrical service available and as shown on electrical drawings. All interior wiring to be "liquidtight" fittings and sealed to prevent water migration. The use of Romex, BX, MC Cable, etc. is prohibited. All inter-wiring to be done by Kitchen Equipment Contractor. .

## **2.4 MISCELLANEOUS MATERIALS**

- A. Installation Accessories, General: NSF certified for end-use application indicated.
  - B. Elastomeric Joint Sealant: ASTM C 920; Type S (single component), Grade NS (nonsag), Class 25, Use NT (nontraffic) related to exposure, and Use M, G, A, or O as applicable to joint substrates indicated.
1. Public Health and Safety Requirements:
- a. Sealant is certified for compliance with NSF standards for end-use application indicated.

- b. Washed and cured sealant complies with the FDA's regulations for use in areas that come in contact with food.
2. Cylindrical Sealant Backing: ASTM C 1330, Type C, closed-cell polyethylene, in diameter larger than joint width.

### **PART 3: EXECUTION**

#### **3.1 INSTALLATION**

- A. Install foodservice equipment level and plumb, according to manufacturer's written instructions.
  1. Connect equipment to utilities.
  2. Provide cutouts in equipment, neatly formed, where required to run service lines through equipment to make final connections.
- B. Complete equipment assembly where field assembly is required.
  1. Provide closed butt and contact joints that do not require filler.
  2. Grind field welds on stainless-steel equipment smooth, and polish to match adjacent finish.
- C. Install equipment with access and maintenance clearances that comply with manufacturer's written installation instructions and requirements of authorities having jurisdiction.
- D. Install Panels and floor on concrete slab within recess and set in a bed of sealant.
- E. Install closure-trim strips and similar items requiring fasteners in a bed of sealant.
- F. Install joint sealant in joints between equipment and abutting surfaces with continuous joint backing, unless otherwise indicated. Produce airtight, watertight, vermin-proof, sanitary joints.

#### **3.2 CLEANING AND PROTECTING**

- A. After completing installation of equipment, repair damaged finishes.
- B. Clean and adjust equipment as required to produce ready-for-use condition.
- C. Protect equipment from damage during remainder of the construction period.

#### **3.3 DEMONSTRATION**

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain walk-in cooler.

### **END OF SECTION**