

SECTION 11 46 01.02

FOOD SERVICE EQUIPMENT (TNG 2600-1)
04/06

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN WELDING SOCIETY (AWS)

AWS A5.8/A5.8M (2004) Filler Metals for Brazing and Braze Welding

ASTM INTERNATIONAL (ASTM)

ASTM A 123/A 123M (2002) Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ASTM A 167 (2004) Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip

ASTM A 240/A 240M (2004ae1) Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels for General Applications

ASTM A 269 (2004) Seamless and Welded Austenitic Stainless Steel Tubing for General Service

ASTM A 36/A 36M (2005) Carbon Structural Steel

ASTM B 32 (2004) Solder Metal

ASTM D 520 (2000) Zinc Dust Pigment

CSA INTERNATIONAL (CSA)

CSA Directory (updated continuously online) Certified Products Listings

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 54 (2006) National Fuel Gas Code

NFPA 70 (2005) National Electrical Code

NSF INTERNATIONAL (NSF)

NSF 2 (2002e) Food Equipment

NSF 7 (2001) Commercial Refrigerators and

Freezers

NSF Product Listing (2002) NSF Product Listings of Food Equipment and Related Products, Components, and Materials

UNDERWRITERS LABORATORIES (UL)

UL 197 (2003) Commercial Electric Cooking Appliances

UL 207 (2001) Refrigerant-Containing Components and Accessories, Nonelectrical

UL 471 (2006) Commercial Refrigerators and Freezers

UL 489 (2002; Rev thru May 2003) Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures

UL 710 (1995; Rev thru Apr 1999) Exhaust Hoods for Commercial Cooking Equipment

UL Elec Equip Dir (2003) Electrical Appliance and Utilization Equipment Directory

1.2 GENERAL REQUIREMENTS

Food service equipment shall be of the sizes and types shown. Equipment, materials, and fixtures required for use in conjunction with the items to be furnished by the Government shall be furnished and installed by the Contractor. Equipment, materials, and fixtures indicated on the drawings and schedules shown as Contractor furnished and installed, shall be furnished and installed by the Contractor.

1.2.1 Mechanical, Electrical, and Plumbing Work

Plumbing systems, including final connections, shall be in accordance with Section 22 00 00 PLUMBING, GENERAL PURPOSE. Electrical equipment, motors, wiring, and final connections shall be in accordance with Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM. Gas piping and accessories, including final connections, shall be in accordance with Section 23 11 23.00 10 GAS PIPING SYSTEMS. Duct work and accessories shall be in accordance with Section 23 00 00 AIR SUPPLY, DISTRIBUTION, VENTILATION, AND EXHAUST SYSTEMS. Painting shall be in accordance with Section 09 90 00 PAINTS AND COATINGS. Air-conditioning systems shall be in accordance with Section 23 82 02.00 10 UNITARY HEATING AND COOLING EQUIPMENT.

1.2.2 National Sanitation Foundation Standards

Food service equipment shall meet the requirements set forth by the National Sanitation Foundation (NSF). Acceptable evidence of meeting the requirements of the applicable NSF standards shall be either the equipment listed in NSF Product Listing displaying the NSF seal for the year the equipment was manufactured, a certification issued for special or specific food service equipment by NSF under their special one time contract evaluation and certification, or a certified test report from an independent testing laboratory, approved by the Office of the Surgeon

General, indicating that the specific food service equipment has been tested and conforms to the applicable NSF standards.

1.2.3 Verification of Dimensions and Coordination of Project Data

The Contractor shall become familiar with all details of the work and shall advise the Contracting Officer of any discrepancy before performing any work. The Contractor shall perform the following:

- a. Horizontal and vertical dimensions shall be field verified.
- b. Contract drawings and submittal data shall be reviewed for accuracy and completeness.
- c. The installed utility capacity and location shall be field checked.
- d. Critical systems/components shall be reviewed for application and capacities such as for ,refrigeration systems, gas, water, and steam/condensate line sizes and manifold configurations.
- e. Delivery shall be coordinated for access through finished openings and vertical handling limitation within the building.

1.2.4 Standard Products

Materials and equipment shall be the standard products of manufacturer regularly engaged in the manufacture of the products and shall essentially duplicate items that have been in satisfactory use for at least 2 years prior to bid opening. The experience used shall include applications of equipment and materials under similar circumstances and of similar size. When two or more of the same products are supplied they shall be products of one manufacturer. Equipment shall be supported by a service organization that is, in the opinion of the Contracting Officer, reasonably convenient to the site.

1.2.5 Nameplates

Each item of equipment shall bear a stainless steel, aluminum, or engraved polyester nameplate, as standard with the manufacturer, located in a conspicuous position and permanently fastened to the equipment. Name or identification plates shall be of the size standard with the manufacturer for the particular piece of equipment provided. Name plates shall reflect the name of the manufacturer/trade name, serial number, make, and model number, pertinent ratings, operating characteristics, and other information as standard with the manufacturer, date of manufacture, electrical characteristics, and other applicable data, such as flow rate, temperature, pressure, capacity, and material of construction. Separate equipment identification plates with the contract number marked thereon, shall be securely fastened to the surface of each piece of equipment.

1.2.6 American Gas Association Laboratories Standards

Gas-burning equipment shall be designed for operation with the type of gas specified and shall be approved by CSA. Acceptable evidence of meeting the requirements of the applicable CSA Directory standards shall be either CSA mark on equipment, a photostatic copy of the CSA appliance certificate, a listing of the specific food service equipment or appliance in the CSA Directory, or a certified test report from a nationally recognized independent testing laboratory, indicating that the specified equipment has

been tested and conforms to the requirements of the applicable CSA standards.

1.2.7 Underwriters Laboratories Standards

Electrically operated equipment shall be in accordance with applicable UL standards such as UL 471, UL 489, UL 710 and UL 197. Evidence of meeting the requirements shall be a UL label on the equipment, a UL listing mark per UL Elec Equip Dir or a certified test report from a nationally recognized independent testing laboratory indicating that the specific food service equipment has been tested and conforms to the applicable UL standards.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Detail Drawings
Installation

Detail drawings, as specified.

SD-03 Product Data

Food Service Equipment

Manufacturer's descriptive and technical literature, performance charts and curves, catalog cuts, and installation instructions. Brochures shall have front and rear protective covers with labeled project name and include an index indicating item number, quantity, description, and manufacturer, a fly sheet for each component indicating item number, name, quantity, manufacturer, optional equipment, modification, special instruction, and utility requirements, and catalog specifications sheets.

SD-06 Test Reports

Testing

Test reports in booklet format showing all field tests performed to prove compliance with the specified performance criteria, upon completion and testing of the installed system. Each test report shall indicate the final position of controls.

SD-10 Operation and Maintenance Data

Food Service Equipment

Six complete copies of the service manual, not later than 3 months prior to the date of beneficial occupancy, with data for each different item of material and equipment specified.

1.4 DELIVERY AND STORAGE

1.4.1 Delivery

Unless otherwise directed, the following procedures shall apply:

- a. Field assembled fixed equipment integrated into structure shall be sent to jobsite when required.
- b. Fixed equipment not integrated into structure shall be sent to the jobsite after completion of finished ceilings, lighting, and acidizing of the finished floor and wall systems, including painting.
- c. Major movable equipment shall be delivered to inventory in a secured area for interim jobsite storage, or if secured area is not available, when fixed equipment installation/clean-up has been completed.
- d. Minor appliances and loose items shall be delivered to the jobsite when the Contracting Officer is prepared to receive and inventory such items.

1.4.2 Storage

Items delivered and placed into storage shall be stored with protection from weather, humidity, and temperature variation, dirt and dust, or other contaminants.

1.4.3 Protection of Fixed/Fabricated Manufactured Equipment

Fiberboard or plywood shall be taped to surfaces as required by equipment shape and installation access requirements.

1.4.4 Prohibited Use of Equipment

Food service equipment shall not be used as tool and material storage, work bench, scaffold, or stacking area.

1.4.5 Damaged Equipment

Contractor shall immediately submit documentation to the Contracting Officer with a recommendation of action for repair or replacement and the impact on project schedule.

1.5 DETAIL DRAWINGS

Data consisting of a complete list of equipment and materials shall be submitted. Detail drawings showing complete wiring, piping, and schematic diagrams, and any other details required to demonstrate that the system has been coordinated and will properly function as a unit. Drawings shall show proposed layout and anchorage of equipment and appurtenances, and equipment relationship to other parts of the work, including clearances for maintenance and operation.

- a. Detail drawings by Contractor shall be separate drawings and shall be the Contractor's standard sheet size, but not smaller than the contract drawings, and indicate the food service equipment and cold storage assemblies with itemized schedule, and special conditions drawings indicating size and location of slab depressions, cores, wall

openings, blockouts, ceiling pockets, blocking grounds, wall, access panels, and above ceiling hanger assemblies, rough-in plumbing/mechanical systems and rough-in electrical systems.

b. Detail drawings by manufacturer shall be separate drawings; sheet size shall be manufacturer's standard size and indicate item number, name, and quantity, construction details, sections, and elevations, adjacent walls, columns, and equipment, plumbing and electrical schematics, and fabricated fixtures with single electrical or plumbing connection, and service access panels required for maintenance or replacement of mechanical or electrical components.

c. Detail drawings by the Contractor that show the size, type, and location of equipment drain lines, and floor drains. Drawings shall indicate drain lines from equipment, distances of drain lines and floor drain receptacles from equipment and aisles, and elevation views of drain piping and floor drains.

PART 2 PRODUCTS

2.1 MATERIALS

The Contractor shall comply with EPA requirements in accordance with Section 01 62 35 RECYCLED / RECOVERED MATERIALS. Other materials shall conform to the following:

2.1.1 Stainless Steel, Nonmagnetic

ASTM A 167 or ASTM A 240/A 240M: 18-8, 300 Series, austenitic, polished to No. 3 or 4 finish on exposed surfaces.

2.1.2 Stainless Steel Pipe and Tubing

ASTM A 269. Pipe and tubing shall be seamless or welded, of the gauge specified, of true roundness, and of material as specified for stainless steel. Seamless tubing shall be thoroughly annealed, pickled, and ground smooth. Welded tubing shall be thoroughly heat-treated, quenched to eliminate carbide precipitation and then drawn true to size and roundness, and ground. Tubing shall be given a No. 3 or 4 finish when exposed to view.

2.1.3 Galvanizing Repair Compound

ASTM D 520, Type I pigment.

2.1.4 Brazing Material

AWS A5.8/A5.8M, class shall be as applicable.

2.1.5 Steel Structural Shapes for Framing

ASTM A 36/A 36M. Structural shapes shall be uniform, ductile in quality, and shall be free of hard spots, runs, checks, cracks and other surface defects. Sections shall be galvanized by the hot-dip process, conforming to ASTM A 123/A 123M.

2.1.6 Coatings

Coatings shall be of a durable, nontoxic, nondusting, nonflaking, and mildew-resistant type, suitable for use with food service equipment and in

conformance with NSF 2. Application shall be in accordance with the recommendations of the manufacturer.

2.1.6.1 Exterior Parts

Exterior, galvanized parts, exposed members of framework, and wrought steel pipe, where specified to be painted, shall be cleaned, and free of foreign matter before applying a rust inhibiting prime and two coats of epoxy-based paint in accordance with Section 09 90 00 PAINTS AND COATINGS, unless otherwise specified. Color shall be selected by the Contracting Officer from manufacturer's standard colors.

2.1.6.2 Solder Material

ASTM B 32, Sn96.

2.2 COUNTERS

Counters shall be constructed in accordance with applicable portions of NSF 2.

2.2.1 Counter Tops

Counter tops shall be constructed of 14 gauge stainless steel with all seams and corners welded, ground smooth, and polished.

2.2.2 Cafeteria Counters

Cafeteria counters shall be constructed and sound deadened as indicated and as specified for counters.

2.2.3 Pitch and Drainage of Equipment Surfaces

Wherever a fixture has a waste or drain outlet, the surface shall have a distinct pitch toward such outlet. Corners shall be coved on 3/4 inch radius and sloped 1/8 inch/foot maintaining level crown at front edges of rolled rims, marine edges, and backsplashes, when tops are sloped to drains.

2.2.4 Drip Gutter

Drip gutter shall be an integral part of the counter top and located below beverage dispensing faucets where indicated. Drip gutter shall be provided with a 1 inch stainless steel drain tube in the bottom of the gutter at the end closest to the floor drain. Bottom shall be pitched to the drain. The drip gutter shall be 5 inches wide, 2 inches deep, and the length indicated. The drip gutter shall be provided with a 5 inch wide, 2 inch high, removable, nonsplash, stainless steel drip plate.

2.2.5 Counter Edges and Backsplashes

2.2.5.1 Counter Edges

Counter edges shall be one of the following types:

- a. Turned Down: 1-1/2 inch at 90 degrees with 1/2 inch kink back at 60 degree angle from horizontal at bottom. Free corners shall be square.
- b. Box Channel Edge: Turned up 3/4 inch at 45-degree angle, turned

out 1 inch horizontally, and turned down 1-1/2 inches at 90 degree angle with 1/2 inch kink back at 60-degree angle from horizontal at the bottom. Free corners shall be square.

- c. Square Channel Rim: Coved up 3 inches with 1-1/2 inch wide rim and turned down 1-1/2 inches at 90 degree angle with 1/2 inch kink back at 60-degree angle from horizontal at the bottom. Free corners shall be square.

2.2.5.2 Counter Backsplash

Counter backsplash shall be one of the following types:

- a. Coved up 8 inches and sloped back 2 inches at the top on a 45-degree angle. Turned down 1 inch at 135 degrees at the rear of the splash with the ends closed to the bottom of the top turn down. Splash turn down shall be secured to wall with 4 inch long, 14 gauge stainless steel "zee" clips anchored to wall, 36 inches on center.
- b. Turned up 4 inches at 90 degrees on a 5/8 inch radius with top edge turned back 1 inch at 90-degree angle with 1 inch turn down at 90 degrees at rear of splash with the ends closed to the bottom of the top turn down. Splash turn down shall be secured to wall with 4 inch long, 14 gauge stainless steel "zee" clips anchored to wall, 36 inches on center.

2.2.6 Counter Top Support Angles

Counter top support channels shall be 1 by 4 by 1 inch 14 gauge stainless steel with all corners mitered, welded, and ground smooth at perimeter. Cross members shall be provided on 24 inches centers maximum. A 4 by 4 inch, 12 gauge stainless steel triangular pad shall be provided where leg gussets are welded to the frame. Angle frame shall be stud bolted to counter top.

2.2.7 Sound Deadening of Counters and Sinks

Counter tops and sinks shall be sound deadened with 1/2 inch wide rope sealant positioned continuously between all contact surfaces of the frame-members and the underside of counter top, overshelves and undershelves. Stud bolts shall be tightened for maximum compression and the excess sealant trimmed.

2.3 COUNTER BASES

Counter bases shall be open or closed as indicated in the item specifications.

2.3.1 Closed Bases

Closed bases shall be constructed with 1-1/2 inch by 1-1/2 inch, 14 gauge stainless steel angle with all corners mitered, welded, and ground smooth. Horizontal and vertical angles shall be provided on 24 inches centers or less. The enclosure panels on closed bases shall be of 18 gauge stainless steel. Enclosed bases shall be double walled on interior, exposed ends, and at interior exposed partitions. Service access shall be provided for utilities supplying equipment designed to fit atop the counter.

2.3.2 Open Bases

Open bases shall be constructed of 1-5/8 inch outside diameter, 16 gauge stainless steel rails welded 360 degrees to the legs.

2.3.3 Gussets

Gussets shall be stainless steel, fully enclosed, a minimum of 3 inch in diameter at the top, reinforced with a bushing, and shall be continuously welded to channel or angle.

2.3.4 Legs

Legs shall be of 16 gauge, 1-5/8 inch outside diameter stainless steel tubing. Legs shall be continuously welded to gussets, channel, or angle as specified.

2.3.5 Feet

Feet shall be sanitary, die-stamped stainless steel bullet-shaped, fully enclosed and shall provide for a 1 inch adjustment without threads being exposed. The bottom of the legs shall be finished off smoothly and the stem overlapped to provide a sanitary closed fitting. Feet for free-standing fixtures requiring utility connections shall be as above except with a flanged plate at the bottom which shall be anchored to the floor with noncorrosive bolts.

2.3.6 Undercounter Shelving

2.3.6.1 Open Base Shelves

Open base shelves shall be constructed of 16 gauge stainless steel with all edges turned down 1-1/2 inches at 90 degrees with 1/2 inch kink back at 60-degree angle from horizontal at the bottom. Corners shall be notched a full 90 degrees and welded from underside to completely fill the gap, ground and polished. Undershelf shall be braced with 1 inch by 4 inch by 1 inch, 14 gauge stainless steel channel at longitudinal center line and between each intermediate pair of legs.

2.3.6.2 Closed Base Shelves

Interior shelves on closed bases shall be constructed of 16 gauge stainless steel. Side edges of the shelf shall be turned up 1/2 inch at 90 degrees on a 1/4 inch radius and tack welded and sealed to the side walls. Rear of the shelf shall be coved up 1-1/2 inches at 90 degrees on a 5/8 inch radius. Vertical joints shall be welded. Front edge shall be turned down 1-1/2 inches at 90 degrees with 1/2 inch kink back at 60-degree angle from horizontal at the bottom. The vertical seam of shelf turn down/turn up shall be welded to the face of body partition. Maximum depth of shelves shall be 27 inches. Shelves shall be reinforced with 1 inch by 4 inch by 1 inch, 14 gauge stainless steel channel. Angle slides, where indicated, shall be 14 gauge stainless steel, 1-1/2 inch by 1-1/2 inch angles, and shall have front and back corners rounded and finished smooth.

2.3.7 Tray Slides

Tray slides shall be solid type. The width of the tray slides shall not be less than 14 inches. The mounting height of the tray slides shall be 32-1/2 inches above the finished floor. Tray slides shall be installed

true and level. Tray slide shall be designed and installed to preclude tray spillage.

2.3.7.1 Solid Type Slide

Solid type slide shall be constructed of 14 gauge stainless steel with the front edge mitered up 1/2 inch on a 45-degree angle. Front edge shall be turned down 2 inches at 90 degrees with 1/2 inch kink back at 60-degree angle from horizontal at the bottom. Free ends of tray slide shall be turned down 1-1/2 inches at 90 degrees with 1/2 inch kink back at 60-degree angle from horizontal at the bottom. At the free ends of tray slide, the bottom edge shall align with the bottom of the front edge. The back edge of the slide shall be turned up 1 inch at 90 degrees behind counter top turn down. Ends of the tray slide abutting walls or taller equipment shall be turned up 1-1/2 inches, tight against the surface and sealed. Two inverted "V" forms, approximately 1/2 inch high, shall be provided in the flat surface of the slide as the running surface for trays.

2.3.7.2 Support Brackets

Support brackets for tray slides shall be solid stainless steel, and shall be secured to the counter with stainless steel truss head bolts. Brackets shall not be spaced more than 48 inches, center to center.

2.3.8 Protector Shelf

Protector shelf shall be installed on the serving line counters and shall be located over the equipment as indicated. Protector shelf shall be as noted in the Item Specifications.

2.4 DISH COUNTERS

Dish counters shall be constructed and sound deadened as indicated and as specified for counters and sinks. The dish counters shall be fitted and flanged into the dishwashing machine with a water-tight joint.

2.4.1 Dish Counter Support Channels

Dish counter support channels shall be 1 inch by 4 inch by 1 inch, 14 gauge stainless steel. Channels shall be provided under dish counter top between each pair of legs. Cross members, on the centerline, shall be provided between legs. Channels shall be stud-bolted to counter top at 6 inches on center, maximum.

2.4.2 Dish Counter Components

2.4.2.1 Prewash Sink

Integral prewash sink shall be as noted in the item specifications.

2.4.2.2 Prerinse Spray

A prerinse spray assembly shall be mounted on the backsplash of the dish counter with vertical tubing, wall bracket, flexible gooseneck hose, and self closing squeeze-type valve and spray. Unit shall be as noted in the item specifications.

2.4.2.3 Hose Bib Faucet

A hose bib faucet shall be mounted on a 12 gauge stainless steel flange or inverted gusset below top of counter, which shall be ground and polished to match counter top.

2.4.2.4 Undershelves

Undershelves shall be the solid type, and shall be constructed as specified for open base shelves.

2.4.2.5 Scraping Trough

Scraping trough in the soiled dish counter shall be 14 gauge stainless steel with all corners 3/4 inch coved, and shall be integrally welded to the dish counter. Trough shall be 8 inches wide minimum and shall be sloped 1/8 inch per foot or from 6 inch depth to height of pulper inlet. One inlet fitting shall be installed at the shallow end of the scraping trough, and intermediate inlet fittings shall be installed in the locations shown on plan. Recirculation piping shall have a ball valve at each inlet.

2.4.3 Glass/Cup Rack Overshelf

Glass/cup rack overshelf shall be as noted in the item specifications.

2.4.4 Dish/Tray Return Shelf

Dish/tray return shelf shall be integral with conveyor slider pan and shall be as noted in the item specifications.

2.4.4.1 Slide-Up Door Frame

Door frame shall be integral with the conveyor and shall be as noted in the item specifications.

2.4.4.2 Slide-Up Door

A slide-up door shall be fitted into the dish/tray return. Enclosure and track installation shall be coordinated with the splash/jambs, and partition bucks.

2.5 SINKS

Sinks shall be of the dimensions indicated and conform to the applicable requirements of NSF 2. Sinks shall be constructed of a minimum of 14 gauge stainless steel. Vertical and horizontal corners shall be rounded to a radius of not less than 3/4 inch with double walls at partitions. Continuous 18 gauge stainless steel exterior filler panels shall be provided between compartments of multiple-compartment sinks and shall be ground and polished to match the adjacent surfaces. The sink bottom shall be scored and sloped to assure drainage to the waste outlet. Sinks shall be equipped with waste and overflow fittings, drain plugs with quick-opening valves, and faucets of the type specified. Faucet and drain plug, and overflow fitting shall be required for each sink compartment, unless otherwise indicated. Spout outlet of faucets shall be a minimum of 5 inches above the rim of the sink. Sink legs shall be as specified for counters, except that closed gussets shall be welded to the support channels. Sinks installed adjacent to walls or enclosures shall be anchored and sealed thereto. Sinks shall be sound-deadened as specified

for counters.

2.5.1 Plumbing/Trim Requirements

2.5.1.1 Drain Plug and Overflow Fittings

Drain shall consist of a 2 inch quick opening brass body valve with side outlet overflow connection with a stainless steel twist lever handle. Removable perforated stainless steel strainer plate shall be not less than 3 inch in diameter. Overflow fittings shall consist of 1-1/4 inch diameter chrome-plated brass tubing of not less than 0.036 inch thickness connected to an overflow head in the back of the sink compartment. Overflow head shall have a removable perforated chrome-plated brass or stainless steel strainer plate of not less than 1-1/2 inch diameter. Overflow head shall be installed in die-stamped opening 1 inch below counter top.

2.5.1.2 Backsplash-Mounted Faucets

Backsplash-mounted faucets shall be combination fitting-type with an exposed body and concealed supply connections at the back of the sink. Faucet shall have 1/2 inch NPT hot and cold inlets on 8 inch centers. Faucet shall have a 8-3/4 inch wide x 12 inch high swivel gooseneck spout. The spout outlet shall be 5-1/2 inches above the spout connection and fitted with an aerator. Faucet shall have 2-1/4 inch chrome-plated metal lever handles and ceramic cartridges. Specification is based on a T&S Model #B-0331-Cerama with Model #135X swivel gooseneck spout with aerator.

2.5.1.3 Counter Top or Ledge-Mounted Faucets

Counter top or ledge mounted faucets shall be combination fitting type with a concealed body and with the supply connections under the countertop. Faucets shall have 1/2 inch NPT hot and cold inlets on 8 inch centers. Faucet shall have a 8-3/4 inch wide x 12 inch high swivel gooseneck spout. The spout outlet shall be 5-1/2 inches above the spout connection and fitted with an aerator. Faucet shall have 2-1/4 inch chrome-plated metal lever handles and ceramic cartridges. Chrome-plated copper alloy or stainless steel escutcheons for valves and spout, locknuts and washers or lock-nut type escutcheons together with coupling nuts, and 1/2 inch pipe size union-tailpieces shall be provided. Specification is based on a T&S Model #B-0321-Cerama with Model #135X swivel gooseneck spout with aerator.

2.5.1.4 Control Valve Mountings

Gusset-shaped 14 gauge stainless steel panel for the control valves shall be mounted on open base fixtures with 3-1/2 inch setback from the countertop edge/rim to the valve handle.

2.5.2 Pot Washing Sinks

2.5.2.1 Final Rinse Compartment

The final rinse compartment of the pot washing sink shall be equipped with a booster heater for sanitizing.

2.5.2.2 Temperature Gauge

Temperature gauge shall have a 3 inch diameter face with stainless steel flange.

2.5.2.3 Valves, Temperature Gauge, and Controls Mounting

Valves, temperature gauge, and controls shall be installed in a stainless steel recessed panel, ready for final connections. A perforated stainless steel casing shall be provided over the temperature bulb.

2.6 PREFABRICATED WALK-IN REFRIGERATORS

Refrigerators shall be prefabricated, commercial, walk-in type suitable for the intended use. Mercury shall not be used in thermometers. Units shall conform to UL 207, UL 471, and NSF 7 floorless, design type and size as indicated, and the following:

2.6 Miscellaneous Requirements

2.6.1 Closure Panels

Closure panels and/or trim strips to the building walls and ceiling shall be installed with concealed attachments. Closure/trim shall be of the same material as the wall panels unless otherwise noted.

2.6.2 I-Beam Supports

Wherever compartment dimension exceeds the clear-span ability of ceiling panels, I-beam supports shall be provided on the exterior of the ceiling or supported by spline-hangers. Half inch diameter steel rods shall be installed through beam/hangers and secured to the structure above. Beams or posts within compartments will not be acceptable.

2.6.3 Identification Signs

Engraved phenolic plastic compartment identification signs 12 by 2 inch high in selected color with 1 inch high letters shall be mounted on door above view window.

2.6.4 Door Stops

Door stops shall be provided, where necessary, to prevent walk-in refrigerator doors from striking adjacent walls, plumbing fixtures or food service equipment when door is open.

2.6.5 Protective Bumpers

The exterior faces of refrigerator that are not installed against each other or against a wall shall be equipped with protective bumpers. Bumpers shall be as noted in the item specifications.

2.6.6 Gasket

Gasket material shall be either natural or synthetic rubber and conform to NSF 2. Where frames are used, the panels shall fit together with gaskets that are designed for 50 percent compression.

2.6.7 Alarm System

An alarm system shall be provided consisting of a controller, pilot and warning lights, and audible alarm as specified by the manufacturer. The controller shall be equipped with normally-open and normally-closed contacts for remote monitoring of the temperature warning alarms and the

power-off conditions.

2.7 Floor

2.7.1 Floorless Refrigerator Floors

Floorless refrigerator floors shall be flush with the surrounding building floor. The built-in floor shall be provided with two layers of 2 inch thick polyurethane board insulation with staggered joints set in mastic. In addition, a watertight seal formed by 6 mil polyethylene sheets with all joints lapped 6 inch and sealed, shall be provided on the surface of the subfloor which will support the insulation and the refrigeration floor. A 15 pound felt slip sheet shall be provided over insulation with 6 inch lapped joints flashed up the height of finished floor base. The subfloor and refrigerator floor shall each be not less than a 4 inch thickness of reinforced concrete with the insulation sandwiched between. The subfloor shall contain drain holes to drain water seepage. Beneath the floor screeds at refrigerator walls and partitions, the insulation shall be extended with a 2 inch thickness down to the insulation sandwiched between the subfloor and the refrigerator floor. The insulation beneath the door shall be as recommended by the manufacturer. The subfloor shall be supported on a fill of 2 inch clean rock aggregate having a minimum depth of 15 inches. In addition, the perimeter shall be embedded within the gravel fill to allow for air circulation.

2.7.2 Refrigeration Equipment

Refrigeration equipment for cold storage facilities shall be as specified in the item specifications.

2.8 ELECTRICAL WORK

Electrical systems, components and accessories shall be certified to be in accordance with NFPA 70 and the following:

2.8.1 Installed Equipment Load

Should the electrical load of the approved equipment differ from that specified or shown on the drawings, the Contractor shall provide and install electrical service compatible with the approved equipment.

2.8.2 Electrical Equipment and Components

Food service equipment furnished under this section shall have loads, voltages, and phases compatible with building system, and shall conform to manufacturer standards.

2.8.3 Cords and Caps

Food service equipment cord/caps shall be coordinated with related receptacles. All 120/208/240 volt "plug-in" equipment shall have Type SO or SJO cord and a plug with ground, fastened to frame/body of item. Mobile equipment shall have a strain-relief assembly at the cord connection of the appliance. Mobile electrical support equipment (heated cabinets, dish carts, etc.) and counter appliances mounted on mobile stands (mixers, food cutter, toaster, coffee makers, microwave ovens, etc.) shall have cord/cap assembly with cord-hanger as provided by the manufacturer.

2.8.4 Switches and Controls

Each motor-driven appliance or electrically-heated unit shall be equipped with control switch and overload protection per UL 197 and UL 471. Switches, controls, control transformers, starters, equipment protection and enclosures shall be Industry standards for the equipment environment.

2.8.5 Motors

Motors at 120, 240, 208/240 and 460/480 volts shall have starter with overload protection and short circuit motor protection per manufacturer standards.

2.8.6 Heating Elements

Electrically-heated equipment shall have thermostatic controls. Water heating equipment shall be equipped with a positive low-water shut-off.

2.8.7 Receptacles and Switches

Receptacles which are located in vertical panels of closed base bodies shall be completely recessed. Receptacles which are located in closed base fixtures shall be prewired to a junction box located within 6 inches from the bottom of the utility compartment. Receptacles which are installed in/on fabricated equipment shall be mounted in a metal box with a stainless steel cover plate.

2.8.8 Light Fixtures

Light fixtures with lamps which are installed in/on fabricated or field-assembled equipment shall be prewired to a junction box for final connection (fixtures shall be continuous run when indicated). Fluorescent display light shall be installed the full-length of the display stand and serving shelf with stud bolts or as indicated, and shall be prewired through a support post to a recess-mounted switch. Heat lamps shall be installed to underside of serving shelf assemblies as specified. Heat lamp length for chassis shall be sized per manufacturer or as indicated on the drawings. Cold storage light fixtures shall be electrically connected through the hub fitting located on the top of the fixture. Horizontal conduit shall be above the ceiling panels. Plastic sleeves shall be installed through ceiling panels for electrical conduit and the penetrations shall be sealed airtight at both sides of panel.

2.8.9 Final Electrical Connection Provisions

Final electrical connection points of equipment shall be tagged with item number, name of devices on the circuit, total electrical load, voltage, and phase. Fabricated equipment containing electrically-operated components or fittings, indicated on utility connections drawings to be direct-connected, shall have each component, fitting, or group thereof prewired to a junction box for final connection. Refer to the drawings for circuit loading. Field-assembled equipment (example, prefabricated cold storage assemblies, conveyor systems, exhaust hoods) shall have electrical components completely interconnected by this section for final connection as indicated on utility connection drawing. The following groups of cold storage assembly electrical devices shall be prewired to a top-mounted junction box for final connection per compartment grouping, unless otherwise indicated.

- a. Light fixtures, switches, and heated pressure-relief vent.

- b. Door/jamb heater and temperature monitors/alarms.
- c. Evaporator fans, defrost elements, freezer fan door switch, and drain line heaters.

2.8.10 Lamps

Food service equipment containing light fixtures shall have standard appliance type bulbs or energy efficient appliance type bulbs as indicated on the drawings. Exposed fluorescent lamps above or within a food zone shall have plastic coated T-8 energy efficient lamps or standard lamps, sleeved in plastic tube with end caps.

PART 3 EXECUTION

3.1 INSTALLATION

Equipment shall be installed at locations shown in accordance with NSF Product Listing and the manufacturer's written instructions. The Contractor shall make provision for the plumbing, heating, and electrical connections and for equipment indicated as being furnished and installed by the Government.

3.1.1 Equipment Connections

Equipment connections shall be complete for all utilities. Unless otherwise specified, exposed piping shall be chromium-plated copper alloy. Steam operating pressure shall be as indicated.

3.1.2 Backflow Preventers

Backflow preventers shall be furnished as specified in Section 22 00 00 PLUMBING, GENERAL PURPOSE. The Contractor is responsible to install backflow preventers as shown on the contract drawings and at all other locations necessary to preclude a cross-connect or interconnect between a potable water supply and any source of nonpotable water, or other contaminant. Backflow preventers shall be installed at all locations where the potable water outlet is below the flood level of the equipment, or will be located below the level of the contaminant. Backflow preventers shall be provided of sufficient size to allow unrestricted flow of water to the equipment, and preclude the backflow of waste or other contamination into the potable water system.

3.1.3 Gas Equipment

Installation of equipment shall conform to NFPA 54. A heavy duty steel cable, 3 to 6 inch shorter than the equipment connector shall be fastened to the equipment and the walls.

3.1.4 Plumbing Work

Plumbing final connection points of equipment shall be tagged, indicating item number, name of devices or components, and type of utility (water, gas, steam, drain). Extensions of indirect waste fitting shall be provided to open-sight hub drain, floor sink or floor drains from food service equipment.

3.2 CONSTRUCTION OF FABRICATED EQUIPMENT

3.2.1 Grinding, Polishing, and Finishing

Exposed welded joints shall be ground smooth and finished to match the adjoining material. Wherever materials have been depressed or sunken by welding operation, such depressions shall be hammered and peened flush with the adjoining surface, and again ground to eliminate high spots. Ground surfaces shall then be polished or buffed to match adjoining surfaces. Care shall be exercised in the grinding operations to avoid excessive heating of the metal and metal discoloration. Abrasives, wheels, and belts used in grinding shall be free of iron and shall not have been used on carbon steel. In all cases, the grain of rough grinding shall be removed by several successively finer polishing operations. The texture of the final polishing operation shall be uniform, smooth, and consistent. The grain direction of horizontal stainless steel surface shall be longitudinal, including the splash back. Polishing at right angle corners shall provide a mitered appearance. Butt and contact joints shall be close fitting and not require solder as a filler. Wherever brake bends occur, the bends shall be free of open texture or orange peel appearance. Where brake work does mar the uniform appearance of the material, such marks shall be removed by grinding, polishing, and finishing. Sheared edges shall be free of burrs, projections, and fins. Where miters or bullnosed corners occur, such miters and corners shall be finished with the underage of the material and ground to a uniform condition. Overlapping of material is not acceptable. Exposed stainless steel surfaces shall have a No. 3 or 4 finish. Finishes of materials, other than stainless steel, shall be comparable in appearance to commercial mill finish. Exposed surfaces shall include:

- a. Exterior surfaces exposed to view.
- b. Interior surfaces exposed to view in doorless cabinets.
- c. Undersides of shelves shall have a ground finish of No. 90 grit or finer.

3.2.2 Fastening Devices

Fastening devices shall be of the same material as the metal being joined when joint pieces are of similar metal. Fastening devices shall be stainless steel when stainless steel is joined to dissimilar metal. Stud bolts shall be a minimum of 1/4-20 stainless steel with length necessary to accept washers, and required nuts, and shall be welded 9 inches on center maximum. Exposed surfaces of equipment shall be free of bolts, screws, and rivet heads. Stainless steel stud bolts shall be used to fasten tops of counters or tables to angle framing and trim to other surfaces. Such bolts shall be of the concealed type. Threads of stud bolts which are on the inside of fixtures and are either visible or might come in contact with a wiping cloth, shall be capped with chrome plated washers, lock washers, and chromium-plated brass cap nuts. Wherever bolts are welded to the underside of trim or tops, the reverse side of the welds shall be finished uniform with the adjoining surface of the trim or the top. Dimples at these points will not be acceptable.

3.2.3 Welding

3.2.3.1 Welding Rods

Welding shall be done with welding rods of the same composition as the sheets or parts welded.

3.2.3.2 Weld Quality

Welds shall be strong and ductile. Welds shall be free of imperfections such as pits, runs, spatter, cracks, low spots, voids, and shall be finished to have the same color as the adjoining surfaces. Butt welds made by welding straps under seams, or by filling in with solder, or by grinding will not be acceptable. Welded joints shall be homogeneous with the sheet metal. Spot welding shall not be substituted for continuous welding. Joints in tops of counters, tables, drainboards, exposed shelving, and sinks shall be joined by heli-arc welding or a process other than carbon-arc welding or one that will permit carbon pick-up. Joints shall be fully welded. Counter tops shall be factory welded into lengths as long as practical in order to reduce field welded joints to a minimum. Exposed welds shall be ground smooth, flush with adjacent surface and free of burrs and sharp edges. Wherever welds occur on nonfood contact surfaces not suitable for grinding or polishing, such welds and the accompanying discoloration shall be sandblasted and coated in the factory with a nontoxic metallic-base paint. Bolts and screws shall be welded by a process that will minimize the possibility of carbide precipitation. Welds in galvanized steel made after galvanizing, and the adjacent areas where galvanizing is damaged, shall be cleaned and coated with galvanizing repair compound.

3.2.4 Soldering

Soldering shall serve only as a filler to prevent leakage and shall be made with solder material. Stainless steel requiring soldering shall first be cleaned of discoloration and then have a soldering flux applied. Excess or remaining flux and catalytic material shall be removed after the soldering has been completed, and the entire soldered joint and adjacent metallic surfaces shall be cleaned with a liquid alkaline or neutralizing agent to prevent any attack on the surrounding metallic surfaces by the soldering flux.

3.2.5 Brazing

Brazing shall be accomplished with brazing material. Brazing shall be used only on copper tubing to brass and bronze connection fittings.

3.3 TESTING

Equipment shall be inspected and tested under operating conditions after installation. If inspection or test shows defects, such defects shall be corrected, and inspection and test shall be repeated. Refrigerator tests shall include the following:

3.3.1 Performance Tests

A detail written test procedure shall be submitted prior to performance of tests. The Contractor shall furnish all instruments, test equipment, and personnel required for the tests; Government will furnish the necessary water and electricity for the installed equipment. Evidence shall be

submitted that the instruments have been properly calibrated by an independent laboratory at the Contractor's expense.

3.3.2 Operating Tests

An operating test shall be performed on all items after complete installation and adjustment. The failed test item shall be corrected and the test shall be rerun.

3.3.3 Clean and Adjust

Debris resulting from this work, as the installation progresses, shall be removed from the jobsite. All food service equipment, prior to demonstration, shall be cleaned and polished, both interior/exterior. Drawer slides and casters shall be lubricated and adjusted. Pressure regulating valves, timed-delay relays, thermostatic controls, temperature sensors, and exhaust hood grilles shall be adjusted, as required, for proper operation. Faucet aerators and line strainers shall be cleaned or replaced. Damage to painted finishes shall be touched up.

3.3.4 Equipment Start-Up/Demonstration

The Contractor shall obtain the services of the manufacturer's representative experienced in the installation, adjustment and operation of the equipment specified. The representative shall supervise the start-up, adjustment, and testing of the equipment, prior to the demonstration. Selected items of equipment and attendees shall be scheduled, with the Contracting Officer, at least 2 weeks in advance of demonstration periods. Equipment shall be carefully tested, adjusted, and regulated in accordance with the manufacturer's instructions and shall be so certified in writing. A thorough operational demonstration shall be provided of all equipment and instructions furnished for general and specific care and maintenance. The Contractor shall submit maintenance manuals as specified in the Submittals paragraph containing the following:

- a. Front and rear protective covers with labeled project name.
- b. Index indicating item number, quantity, description, manufacturer's name, and model number.
- c. Maintenance instructions for stainless steel and plastic laminate.
- d. Manufacturer's catalog specification sheets and manufacturer's detail and control drawings.
- e. Manufacturer's operation manual outlining the step-by-step procedures for equipment installation, startup, basic operation features, and operation shutdown.
- f. Manufacturer's maintenance manual listing routine maintenance procedures, possible breakdowns, repairs, and troubleshooting guides. The instructions shall include simplified diagrams for the equipment as installed.
- g. Manufacturer's list of parts and supplies with current unit price and address of manufacturer's parts supply warehouse.

PART 4 ITEM SPECIFICATIONS

4.1 #1 Receiving Scale on Mobile Stand
Government Furnished - Government Installed

Receiving scale shall be a counter model mechanical dial indicating scale with overall dimensions of 15" wide x 24" deep x 38" high. Scale platform shall measure 13-3/4" x 19" and shall have a stainless steel platform cover. Scale shall have a painted steel base with leveling feet. Scale shall have a temperature compensated spring with rack and pinion mechanism. Indicating dial shall be 16-3/4" in diameter with a reading line diameter of 15" and shall have a capacity of 100 lbs. in 2 oz. increments. Scale shall have a tare knob mounted on top of the dial housing. Scale shall be mounted on a chrome plated stand constructed of square tubing. Stand shall be 19" wide x 31-5/8" long x 26" high. Stand shall be mounted on four swivel casters. Specifications are based on a Hobart Model #HOB15-1 with #8280 stand.

4.2 #2 Receiving Desk
Government Furnished - Government Installed

Receiving desk shall measure overall 60" wide x 30" deep x 29-1/2" high. Desk shall have a plastic laminate top, painted steel base with single pedestal, two drawers in the pedestal, drawer below the top, and chrome plated legs. Specifications based on HON Metro Classic series.

4.3 #3 Storage Pallets
Vendor Furnished - Vendor Installed4.4 #4 Platform Trucks
Government Furnished - Government Installed

Each platform truck shall be an all welded aluminum unit with 2,500 pound capacity. Platform shall be 60" x 28" diamond tread aluminum with lips on each edge to keep products from sliding off and strap holders on the bottom edge. Units shall have a full perimeter bumper, 8" diameter heavy duty casters, two fixed and two swivel, and a welded U shaped aluminum handle. Specifications are based on a Kel Max Model #ALFCD2860.

4.5 #5 Shelving Units
Government Furnished - Government Installed

Shelving shall be by the same manufacturer as all other shelving on the project. Shelves shall be constructed of welded type 302 or 304 stainless steel wire. Shelves shall have #9 wire ribs running front to back on 13/16" centers, with #6 wire support ribs located on 8" centers and corrugated reinforcement on all four sides. Welded into each corner shall be a stainless steel tapered collar shaped and sized to fit the post and inner tapered split sleeve. Vertical support posts shall be stainless steel and shall be 1" diameter with rolled circular grooves 1" apart along their length. Shelf shall be mounted to post by means of a 2 piece plastic split sleeve snapped around the post at the desired shelf height, with the resultant tapered surface contacting the matching tapered collar in the shelf corner.

Each section of shelving shall measure approximately 48" long x 24" deep x 80" high overall. Each section of shelving shown on drawing shall be five shelves high. Each section of shelving shall have four 74" high posts. Each post shall have an a 5" diameter swivel stem caster with polyurethane tire

and donut bumper. Shelving shall be installed as shown on plan with the shelves spaced equally and with the bottom of the lowest shelf 6" above floor. Shelving units shall be arranged as shown on drawing. Specifications are based on InterMetro Super Erecta shelving.

4.6 #6 Freezer Condensing Units and Evaporators Contractor Furnished - Contractor Installed

Each freezer compartment refrigeration system shall be a pre-assembled remote split system with air-cooled direct expansion components. Condensing unit and evaporators shall be provided by the same manufacturer as the Walk-In Refrigerators and Freezer (Item #10). The evaporators shall be mounted at the ceiling of the freezer compartment, along the back wall, and the condensing unit racks shall be mounted on a concrete pad outdoors as shown on plan. Refrigeration system shall be designed by the manufacturer to meet the design condition of 100 degrees F. ambient air and -10 degrees F. indoor temperature taking into consideration the altitude at the place of installation. The system shall have a capacity at least 20 percent higher than the actual calculated load.

Freezer systems shall have an air cooled condensing unit with a scroll type compressor operating on R-404A refrigerant. Condensing units shall be wired 208-60-3 phase. Freezer systems shall have sufficient number of evaporators to provide even air flow throughout the compartments. Evaporators shall be sized to match the capacity of the condensing units. Evaporators shall have low profile design to provide maximum clearance below. Evaporators shall have multiple fans and motors operating at 208-60-1 phase. Each evaporator shall have an automatic electric defrost cycle. Each evaporator shall be connected to the condensing unit and shall be controlled by the control circuit and timer in the condensing unit.

Furnished with each system shall be a liquid line dryer, liquid line solenoid, expansion valve, suction and discharge vibration arrestors, a timer for electric defrost, a moisture liquid indicator, suction line filter, a room thermostat, pre-wired control panel and high and low pressure control.

Evaporators shall be ceiling hung by 3/8" nylon bolts with stainless steel washers and nuts. Hanger bolts shall be inserted through plastic sleeves with the penetrations sealed airtight.

All refrigeration lines shall be extended from the condensing units to the evaporators, and insulated after the systems have been thoroughly checked for refrigerant leaks. The insulation shall be continuous for the full length of all copper lines. The refrigeration lines shall be supported approximately every 8'-0" and at all turns. The copper refrigeration lines shall be isolated from the metal hangers. All joints in the insulation shall be sealed with insulation sealer. All insulated refrigeration piping located outdoors and exposed shall be covered completely with plastic sleeving secured and sealed in place.

Any penetration of the walk-in insulated panels for electrical wiring and conduit, refrigeration lines, drain lines and/or other services shall be made through vapor tight sleeves that pass completely through the panels and are sealed to the exterior and interior metal surfaces to prevent the infiltration of air into the insulated cavity. Interior of all sleeves shall be filled with suitable low temperature caulking. The interior of all electrical conduit shall also be sealed.

Provide a type L copper, 1" condensate drain line from each evaporator drain pan extending outside the freezer and discharging into a floor drain. Bottom of each drain pan shall have a cast tee fitting with union and cleanout plug. Drain line shall be pitched 1/2" per foot for the full length and the end of the drain line above the floor drain shall have a "P" trap. Wrap the freezer drain line with electric heat tape and cover with 1/2" foamed plastic insulation with flame spread rating of 25 or less and smoke developed rating of 50 or less as tested by ANSI/ASTM E84 (NFPA 255) method.

Each condensing unit shall be supplied with a steel rack, stainless steel weatherproof outdoor housing, crankcase heater, and low ambient temperature head pressure control. Condensing units shall have an oil separator which shall be piped to compressor crankcase with a shut-off valve in return line. Condensing units shall have a 12" x 2" engraved phenolic plastic identification sign in Contracting Officer's selection of color with 1" letters. Freezer compartments shall be complete with all the above specified equipment including refrigerant and all additional refrigeration equipment and accessories required to make a complete refrigeration system. The refrigeration systems shall be completely installed as indicated on the plans with the connections to condensing units, evaporators, solenoids, contactors, controls, lights, door heaters, threshold heaters, room thermostats and all component parts to be under the electrical sections of the contract documents. Unit shall be charged and adjusted and after the initial start-up and adjustment, the installing contractor shall furnish a one year refrigeration service policy on a local level including all labor, material, refrigerant and mileage. Specifications are based on Kolpak condensing units and evaporators.

4.7 #7 Refrigerator Condensing Units and Evaporators Contractor Furnished - Contractor Installed

Refrigerator compartment refrigeration systems shall each be a pre-assembled remote split system with air-cooled direct expansion components. Condensing units and evaporators shall be provided by the same manufacturer as the Walk-In Refrigerators and Freezer (Item #10). The evaporators shall be mounted at the ceiling of each refrigerator compartment, centered on the back wall, and the condensing unit racks shall be mounted on concrete pads outdoors as shown on plan. Each refrigeration system shall be designed by the manufacturer to meet the design condition of 100 degrees F. ambient air and 35 degrees F. indoor temperature taking into consideration the altitude at the place of installation. Each system shall have a capacity at least 20 percent higher than the actual calculated load.

Each refrigerator system shall have an air cooled condensing unit with a welded hermetic compressor operating on R404A refrigerant. Condensing units shall be wired 208-60-3 phase. Refrigerator systems shall have sufficient number of evaporators to provide even air flow throughout the compartments. Refrigerator compartments shall have evaporators sized to match the capacity of the condensing units. Evaporators shall have low profile design to provide maximum clearance below. Evaporators shall have multiple fans and motors operating at 120-60-1 phase. Each evaporator shall have an off-cycle air type defrost. Each evaporator shall be connected to its corresponding condensing unit.

Furnished with each system shall be a liquid line dryer, liquid line solenoid, expansion valve, suction and discharge vibration arrestors, a timer for defrost, a moisture liquid indicator, suction line filter, a room

thermostat, pre-wired control panel and high and low pressure control.

Evaporators shall be ceiling hung by 1/4" nylon bolts with stainless steel washers and nuts. Hanger bolts shall be inserted through plastic sleeves with the penetrations sealed airtight.

All refrigeration lines shall be extended from the condensing units to the evaporators, and insulated after the systems have been thoroughly checked for refrigerant leaks. The insulation shall be continuous for the full length of all copper lines. The refrigeration lines shall be supported approximately every 8'-0" and at all turns. The copper refrigeration lines shall be isolated from the metal hangers. All joints in the insulation shall be sealed with insulation sealer. All insulated refrigeration piping located outdoors and exposed shall be covered completely with plastic sleeving secured and sealed in place.

Any penetration of the walk-in insulated panels for electrical wiring and conduit, refrigeration lines, drain lines and/or other services shall be made through vapor tight sleeves that pass completely through the panels and are sealed to the exterior and interior metal surfaces to prevent the infiltration of air into the insulated cavity. Interior of all sleeves shall be filled with suitable low temperature caulking. The interior of all electrical conduit shall also be sealed.

Provide a type L copper, 1" condensate drain line from each evaporator drain pan extending outside the refrigerator and discharging into a floor drain. Bottom of each drain pan shall have a cast tee fitting with union and cleanout plug. Drain line shall be pitched 1/2" per foot for the full length and the end of the drain line above the floor drain shall have a "P" trap.

Each condensing unit shall be supplied with a steel rack, stainless steel weatherproof outdoor housing, crankcase heater, and low ambient temperature head pressure control. Each condensing unit shall have a 12" x 2" engraved phenolic plastic identification sign in Contracting Officer's selection of color with 1" letters. Each refrigeration system shall be complete with all the above specified equipment including refrigerant and all additional refrigeration equipment and accessories required to make a complete refrigeration system. The refrigeration systems shall be completely installed as indicated on the plans with the connections to condensing units, evaporators, solenoids, contactors, controls, lights, door heaters, threshold heaters, room thermostats and all component parts to be under the plumbing sections of the contract documents. Units shall be charged and adjusted and after the initial start-up and adjustment, the installing contractor shall furnish a one year refrigeration service policy on a local level including all labor, material, refrigerant and mileage. Specifications are based on Kolpak condensing units and evaporators.

4.8 #8 Doorway Closures

Contractor Furnished - Contractor Installed

Doorway closures shall be installed on the interior of the walk-in door openings (Item #10) as shown on the plan. Each closure shall consist of two clear flexible PVC swinging panels with a center overlap for a tight seal. Panels shall open with minimum force and close automatically in seconds. The closing speed shall be fully adjustable. Each doorway closure shall have polished stainless steel hinges guaranteed not to rust or corrode. Crystal clear door panels shall be 0.120" thick and shall be provided in freezer formulation to remain flexible in freezer temperatures. Panels

shall be packaged flat, not rolled, to insure straight hanging for a tight seal. Door panels shall be field adjusted and modified for a perfect fit. Door panels shall be furnished in the proper height and width to completely close the walk-in door openings. Doorway closures shall be installed in accordance with the manufacturer's recommendations. Specifications are based on Aleco Clear-Valu ImpacDor.

4.9 #9 Faucet Hose Stations
 Contractor Furnished - Contractor Installed

Faucet and hose stations shall each consist of a hot and cold water washdown station with thermometer, mixing valves, 50'-0" hose, water gun and hose rack. Mixing valves shall be heavy duty chrome plated cast bronze construction with renewable disc, nickel alloy seats, integral check valve and cast bronze unions. Mixing valves shall have 1/2" inlets, 6" on center and a brass thermometer tee with a stainless steel thermometer with a range of 50 degrees to 500 degrees F. Atmospheric backflow preventers shall be provided for protection against both back siphonage and backflow.

Hose shall be 3/4" diameter, 50 feet long, white, oil resistant EPDM with braided high tensile synthetic textile cord, rated at 200 degrees F. temperature and 200 P.S.I. working pressure. Hose shall have chrome plated brass swivel couplings at both ends. Water gun shall have a brass body with white protective rubber cover, front trigger design and 9/16" outlet orifice. Hose rack shall be constructed of stainless steel rod and shall be mounted to the wall. Specifications are based on T&S Brass and Bronze Works Model #MV-0771-11CW.

4.10 #10 Walk-In Refrigerators and Freezers
 Contractor Furnished - Contractor Installed

Walk-in shall consist of two freezer compartments and three refrigerator compartments. Walk-in shall be a prefabricated metal clad polyurethane insulated walk-in in the size, shape and arrangement as shown on the plan measuring overall approximately 49'-11" wide x 48'-0" deep x 10'-5" high. Walk-in compartments shall be arranged as shown on plan. The interior dimensions shall be as noted below:

Compartment	Width	Depth	Height
Produce/Issue Refrigerator	12'-0"	35'-6-1/2"	10'-1"
Meat and Dairy/Issue Refrigerator	12'-1-1/2"	35'-6-1/2"	10'-1"
Thaw Refrigerator	12'-1-1/2"	19'-1-1/2"	10'-1"
Issue Freezer	12'-0"	19'-1-1/2"	10'-1"
Freezer	24'-5-1/2"	27'-10 1/2"	10'-1"

Walk-in shall be floorless and shall be mounted to the insulated building floor by means of 1-3/4" high PVC floor screeds. Floor screeds shall be secured and sealed to the building floor.

This walk-in shall be constructed in accordance with the Underwriters Laboratories and the National Sanitation Foundation standards and shall bear their seals. Walk-in shall be built with 4" thick prefabricated sections. Panels shall consist of precision roll formed inner and outer metal pans separated by foamed-in-place rigid urethane insulation. Panels shall have foamed-in-place double tongue and groove edges which are the same density as the rest of the panel. Panels shall have flexible vinyl

gaskets on the interior and exterior perimeter of each panel. Vertical edges of panels shall have a minimum of three cam type locking assemblies foamed-in-place at time of fabrication. Cam locks shall be actuated from the interior of the walk-in and the wrench holes shall be furnished with stainless steel plugs. Each panel shall be completely filled with foamed-in-place urethane insulation and shall be tested for voids before leaving the factory. Insulation shall have a flame spread rating of 25 or less in accordance with ASTM E-84 and shall be certified with a UL label. The "K" factor shall be 0.121, the "U" factor shall not exceed 0.030 and the "R" factor shall be 33.3.

Wherever compartment dimension exceeds the clear-span ability of ceiling panels, I-beam supports shall be provided on the exterior of the ceiling or supported by spline-hangers. Half inch diameter steel rods shall be installed through beam/hangers and secured to the structure above. Beams or posts within compartments will not be acceptable.

The interior walls and ceiling and the exposed exterior walls shall be 22 gauge type 304 stainless steel with #4 finish. All unexposed exterior walls and exterior top shall be 26 gauge galvanized steel.

The produce refrigerator, meat and dairy refrigerator and freezer compartments shall each have a bi-parting horizontal sliding power door on the side of the compartment facing the dock. Doors shall be located as shown on plan. Each door shall have a clear opening of 5'-0" wide x 8'-0" high. Each door shall have 4" thick polyurethane insulation and 22 gauge stainless steel interior and exterior finish. Doors shall have heavy duty track assembly, adjustable gaskets at sides and head of frame, sweep gaskets, heater cables, inside safety release, and safety edge to provide instant stop and reverse on contact. Doors shall have a 3/4 HP continuous duty motor, variable frequency drive, soft start speed, 24 volt control circuit and interior and exterior industrial pull cord switches.

Walk-in compartments shall be provided with flush entrance doors located and hinged as shown on drawing. Each door opening shall measure 36" wide x 84" high with interior and exterior of door covered with 22 gauge stainless steel with a #4 finish. Doors shall be fully insulated with 4" thick urethane foam. All door hardware shall be heavy duty type in brushed chrome finish with door to have three cam lift hinges, latch with keyed cylinder lock, padlock capability, and inside safety release. Doors shall be fitted with a 14" x 24" triple pane view port with heated glass and frame. Doors shall be equipped with magnetic gaskets and positive door closer. Door hinges and closers shall be suitable for the size of the door. Each door shall have a door stop to prevent door from striking the face of the walk-in when opened. Door jambs shall be equipped with perimeter anti-condensation heaters. Door jambs shall be fabricated with fiberglass reinforced plastic for high impact strength. The bottom of each door shall be equipped with special double sweep gaskets that seal the bottom of the door to the floor. Heater wires shall be provided below a 12 gauge stainless steel threshold plate below the entrance door. Threshold plates shall be flush mounted and sealed to the building floor in a concealed manner. The front of each door, above the view port, shall have a 12" x 2" engraved phenolic plastic identification sign in Contracting Officer's selection of color with 1" letters.

Each door section shall be fitted with a recessed 2-1/2" dial thermometer mounted above the door latch at approximately 60" above the floor. Each door section shall have a vapor proof light fixture centered above the door with a light switch and pilot light mounted on the exterior door jamb below

the thermometer. Each compartment shall be furnished with additional ceiling mounted light fixtures in quantities sufficient to achieve 0.75 watts per square foot of even light on the interior. Each light fixture shall be furnished with a 26 watt compact fluorescent light bulb with ballast suitable for operating at -10 degrees F. temperature. The ceiling mounted light fixtures shall be field wired with the conduit and wiring extended on the top exterior of the walk-in and connected to thru-ceiling junction boxes. The interior and exterior of all electrical conduit and penetrations through the walk-in panels shall be sealed.

Provide and install matching 22 gauge stainless steel trim strips to close the gap between the walk-in and the building walls. Trim strips shall extend from the floor to the finished ceiling and shall be mounted and sealed to the building walls and walk-in walls in a concealed manner. Walk-in shall also be supplied with a fixed 22 gauge stainless steel closure panel extending from the top of the walk-in to the building ceiling on the exposed front as required. Top of panels shall be formed in and secured to the ceiling in a concealed manner. Panels shall extend down to conceal the joints of the walk-in ceiling panels. Bottom of closure panels shall have a hug edge and shall be secured to the walk-in with adhesive. Closure panel joints shall align with wall section joints. Mounted to the entire exposed exterior face of the walk-in, except at the door openings, shall be a continuous 16 gauge stainless steel hat channel bumper rail. The bumper rail shall be mounted 20" above the finished floor in a concealed manner. The ends of the bumper rail shall be welded closed. Any exposed corners shall be furnished with a 16 gauge stainless steel corner guard measuring 6" x 6" x 72" mm high. Corner guard shall be secured with adhesive and stainless steel screws and shall be sealed to the wall panels.

The produce refrigerator compartment and meat and dairy refrigerator compartment shall each have an aluminum security partition located as shown on plan. Each fence shall extend from floor to ceiling and from wall to wall. Each security fence shall be constructed with 2" square 10 gauge aluminum vertical frames with with infill panels constructed of 1-1/4" x 2-1/4" horizontal aluminum T-bars in a perimeter frame. Each fence shall have a hinged door with a 3'-0" wide x 7'-0" high clear opening. Doors shall be located and hinged as shown on plan and shall be constructed the same as the side panels. Each door shall have a latch with padlock capability. All components of the fence shall be welded together. Each fence shall be secured to the floor and ceiling of the walk-in compartment.

Contractor shall erect this walk-in in place, carefully sealing it to the building floor with non-hardening caulking compound all in accordance with the manufacturer's recommendations. Walk-in specifications are based on a Kolpak walk-in. Aluminum partition specifications are based on a New Age security fence.

4.11 #11 Air Curtains

Contractor Furnished - Contractor Installed

Two air curtains at the company loading dock, leading into the receiving area and container drop-off area, shall each be a wall mounted commercial type unheated unit. Each wall mounted unit shall measure overall approximately 3" wider than the door opening x approximately 18" deep x 15" high. Air curtains shall have a 16 gauge stainless steel cabinet with removable top and bottom panels and stainless steel inlet screen on the front face. Units shall have galvanized steel blower wheels and housing with balanced forward curved centrifugal type, double inlet, double width fans with aerodynamically formed air inlet venturies. Air curtains shall

have airfoil shaped extruded aluminum adjustable air discharge vanes. Air curtains shall have 1/2 horsepower single speed motors with sealed bearings, wired 120-60-1 phase. Air curtains shall have ACMA certified ratings of 1,728 fpm average outlet velocity, and 87% outlet velocity uniformity. Air curtains shall be furnished with an automatic switch for each door which automatically activates the unit when the door opens and deactivates unit when door closes. Air curtains shall be mounted to the wall above the door opening in accordance with the manufacturer's instructions and shall be located as low as possible. Specifications are based on Berner KSA series ambient units.

Twelve air curtains at the soldier entrances into the serving area and at the soldier exits near the dishwashing area shall be in-ceiling mount units with the bottom surface flush with the ceiling in accordance with Detail #A4/QF504 on the drawings. Each unit shall measure overall approximately 5" wider than the door opening x approximately 24-1/2" deep x 15-1/2" high. Air curtains shall have a mill finish aluminum cabinet with a white finished bottom panel with removable access panel, inlet screen and washable filter. Units shall have galvanized steel blower wheels and housing with balanced forward curved centrifugal type, double inlet, double width fans with aerodynamically formed air inlet ventureries. Air curtains shall have airfoil shaped extruded aluminum adjustable air discharge vanes. Air curtains shall have 1/2 horsepower three speed continuous duty motors with sealed bearings, wired 120-60-1 phase. Air curtains shall have ACMA certified ratings of 1,965 fpm average outlet velocity, and 72% outlet velocity uniformity. Air curtains shall be furnished with a remote fan speed selector switch which shall be recessed in the building wall. Each door shall have a magnetic reed switch with an adjustable time delay relay. Air curtains shall be suspended from threaded rods secured to the building structure above in accordance with the manufacturer's instructions. Specifications are based on Berner FCM series ambient units.

4.12 #12 Not Used

4.13 #12a Can Racks

Government Furnished - Government Installed

Each can rack shall be sized to hold (162) #10 size cans and shall measure approximately 25" x 35" x 71" high. Can racks shall be of all welded aluminum construction with can guides sloped from the rear to the front to provide stock rotation when loaded from the rear. Vertical corner uprights shall be constructed of 1-1/4" x 1-1/2" x .070 wall extruded aluminum tubing to which 1" x 1" x .070 wall horizontal cross braces are welded. Can guides shall be constructed of 1-1/4" x 1-1/4" x .100 thick angles and 1-1/4" x 2-1/4" x .100 thick tees with front and rear edges turned up 3/4". Can racks shall be mounted on threaded stem type adjustable feet. Can racks shall be furnished with all standard equipment and shall be in accordance with the manufacturer's standard specifications. Specifications are based on New Age Industrial Corp., Inc. Model #1250.

4.14 #13 Dunnage Rack

Government Furnished - Government Installed

Dunnage rack shall be constructed of Type 6063-T5 high tensile extruded aluminum tube measuring 1-1/2" x 1-3/4" x .070" wall thickness throughout. Dunnage rack shall measure 24" wide x 36" long x 12" high and shall have 4 lateral tubes. All joints shall be heli-arc welded and the feet shall be capped and welded. Each dunnage rack shall have a minimum weight capacity of 1150 kg. Specifications are based on a New Age Model #2008 dunnage rack.

4.15 #13a Carts

Government Furnished - Government Installed

Each cart shall be a portable aluminum rack measuring overall 24" x 60" x 72" high. Each rack shall be constructed of type 6063-T5 aluminum with the frame constructed of 1-1/2" x 1-1/2" x .070" square tubing. Each rack shall have three shelves consisting of a 1-1/2" x 1-3/4" x .070" rectangular frame with 1-1/4" x 2-1/4" x .100" T-bars spaced at 1-3/4" intervals and welded perpendicular to the shelf length. All joints and seams of the racks shall be heli-arc welded. Racks shall have corner bumpers and shall be mounted on 5" all swivel casters without brakes. Specifications are based on New Age Model #1048TB-M5-B racks.

4.16 #14 Vegetable Prep Sink

Contractor Furnished - Contractor Installed

Vegetable prep sink shall be custom fabricated in the size, shape and arrangement shown on drawing, measuring overall approximately 16'-6" long x 30" wide x 34" high to working level. Top and sink compartments shall be constructed of 14 gauge stainless steel. All free edges of top shall be terminated in a 3" high x 1-1/2" diameter rolled rim. The rear edge of top abutting the wall shall be formed up into a 12" high x 2" thick backsplash.

Welded integrally into the top at the end next to the peeler, Item #23, shall be a sink measuring inside approximately 28" wide x 26-1/2" front to back x 12" deep. Also welded into the top shall be two sinks measuring inside approximately 24" x 24" x 12" deep. Each sink shall be fitted with a twist handle drain with overflow. A 14 gauge stainless steel tab shall be stud bolted to the bottom of each sink to support the drain handle. Mounted to back splash and centered above the single sink and above the partition between the two other sinks shall be two faucets with goose neck spouts as specified in Section #2.6.1.2

Integrally welded into the top in the location shown on plan shall be a disposer cone specified under Item #15. Mounted to the backsplash and centered above the disposer bowl shall be pre-rinse spray specified under Item #52.

Top shall be mounted to an open tube base. Base below the drain board on the end opposite from the peeler shall have a full length stainless steel undershelf. The remainder of the base shall be open to the floor with no rail bracing on the working side. Legs not connected to an undershelf or to rails in two directions shall have stainless steel flanged feet secured and sealed to the floor. Vegetable prep sink shall otherwise be constructed in accordance with Part 2 of these specifications.

4.17 #15 Disposers

Contractor Furnished - Contractor Installed

Disposers shall be 5 HP commercial units by the same manufacturer as all other disposers specified on this project. Disposer shall be equipped with an 18" diameter 16 gauge stainless steel cone integrally welded to the top. Cone shall have two adjustable water inlet nozzles. Collar at the base of the cone shall be equipped with a safety baffle. Disposer shall have a 3/4" resilient mounting between the collar and the grind chamber. Disposer shall have a stainless steel grind chamber with water inlet and a 3" waste outlet. The rotating shredder shall be a one piece casting. The stationary and rotating shredders shall be of thick precision cast high carbon, high

nickel, high chrome alloy. The 5 HP motor shall be a totally enclosed induction type motor provided with built-in manual reset thermal overload protection and wired 208-60-3 phase. The motor shall be equipped with a stainless steel exterior housing. Disposer shall be furnished with a water solenoid valve, a syphon breaker and a control center. The control center shall be in an 18 gauge stainless steel NEMA 4 enclosure measuring overall approximately 8" wide x 10" high x 5" deep. The control center shall have automatic reversing magnetic contactors, waterproof push button operators and automatic drop-out system. The control center shall be mounted to the underside of the top next to the disposer, as indicated on the plan. Control center shall be mounted on a 14 gauge stainless steel all welded bracket. Front face of control panel shall be recessed 4" back from the front edge of top. Specifications are based on In-Sink-Erator #SS-500-18C disposers with #CC-202 controls.

4.18 #16 Roll-In Refrigerators
Contractor Furnished - Contractor Installed

Each refrigerator shall be a two section tall roll-in unit with 79.5 cubic feet capacity, constructed by the same manufacturer as all other refrigerators and freezers on the project. Refrigerator shall be constructed of stainless steel on the front, door, sides and interior. Interior floor and exterior bottom shall be stainless steel insulated with 3/4" resilient cork and furnished with removable stainless steel exterior ramps. The refrigerator shall measure overall 68" wide x 35-9/16" deep x 89-1/8" high. Each refrigerator door opening shall be 27-1/16" wide x 72-3/16" high. Refrigerator shall have two full height doors hinged on the outside ends as shown on plan with self-closing, gravity action, cam-lift hinges. The doors shall have a 120 degree stay open feature. The doors shall have a removable vinyl magnetic gasket and the door frames shall have anti-condensate heaters. The horizontal door handle shall be mounted over a recess in the door. Door shall be equipped with a cylinder lock and key. The door hinges shall include a switch to automatically activate the interior incandescent lighting. The refrigerator cabinet and door shall have non CFC foamed-in place polyurethane insulation.

The refrigeration system shall be a top mounted self-contained unit consisting of a 1/2 HP condensing unit wired 120-60-1 phase. The refrigerant shall be R134a. Refrigerant shall be controlled by a thermostatic expansion valve. The refrigerator shall be equipped with an electrical cord and NEMA #5-15P plug. The refrigerator controls shall feature 3 digit LED display, temperature monitoring, internal time clock, 72 hour data storage and display capability of Fahrenheit or Centigrade temperatures. The control shall have visual and audible alarm warnings for hi/lo cabinet temperature, evaporator coil sensor failure, clogged filter-clean condenser, discharge line sensor failure, power supply interruption and door open cycles and times. The refrigerator shall be furnished with a one year refrigeration service policy on a local level. The refrigerator shall be equipped with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. The bottom of the refrigerator shall be sealed to the floor. The specifications are based on Traulsen Model #RRI232HUT-FHS.

Furnished with each refrigerator shall be two roll-in universal angle racks sized to fit the refrigerator. Racks shall measure 24-1/2" wide x 25" deep x 56" high and shall be furnished with 12 pairs of universal angle slides. Top and bottom slides shall be welded to the rack frame. The remaining sets of slides shall be adjustable on 1-1/2" centers. Each set of slides shall hold (1) 18" x 26" pan or (2) 12" x 20" pans and all pans shall be

supported on the bottom of the pan. The rack frame shall be constructed of all welded aluminum extruded channels with aluminum bolsters at the base for mounting the casters. Casters shall be mounted inboard of the edges of the rack to allow easy movement in and out of the roll-in. Casters shall be all swivel with 5" diameter x 1-1/4" wide neoprene tires. Specifications are based on Cres-Cor Model #207-UA-12-AC racks.

4.19 #16a Roll-In Refrigerators

Contractor Furnished - Contractor Installed

Each refrigerator shall be a three section tall roll-in unit with 120.5 cubic feet capacity. Refrigerators shall otherwise be the same as Item #16. Specifications are based on Traulsen Model #RRI332HUT-FHS. Each refrigerator shall be furnished with three roll-in universal angle racks the same as specified for Item #16. Specifications are based on Cres-Cor Model #207-UA-12-AC racks.

4.20 #17 Tables

Government Furnished - Government Installed

Tables shall be the size, shape and arrangement shown on drawing. Seven tables shall be 48" long x 30" wide x 35-1/2" high to working level. Five tables shall be 60" long x 30" wide x 35-1/2" high to working level. The top shall be constructed of 14 gauge stainless steel with all edges formed down 2" square. The top shall be depressed 3/16" with a 3/4" wide rim on all sides. Top shall be mounted to an open tube base with stainless steel legs and an 18 gauge stainless steel full length undershelf. Each table shall be mounted on 5" diameter all swivel casters, two with brakes. Specifications are based on Advance Tabco Model #VSS-30X series tables with #TA-25 casters.

4.21 #18 Tables

Government Furnished - Government Installed

Tables shall be the size, shape and arrangement shown on drawing, measuring overall approximately 36" long x 30" wide x 35-1/2" high to working level. The top shall be constructed of 14 gauge stainless steel with all edges formed down 2" square. The top shall be depressed 3/16" with a 3/4" wide rim on all sides. Top shall be mounted to an open tube base with stainless steel legs and an 18 gauge stainless steel full length undershelf. Each table shall be mounted on 5" diameter all swivel casters, two with brakes. Specifications are based on Advance Tabco Model #VSS-303 tables with #TA-25 casters.

4.22 #19 Equipment Stands

Government Furnished - Government Installed

Equipment stands shall be the size, shape and arrangement shown on drawing, measuring overall approximately 24" long x 30" wide x 30" high to working level. The top shall be constructed of 14 gauge stainless steel with all edges formed down 2" square. The top shall be depressed 3/16" with a 3/4" wide rim on all sides. Top shall be mounted to an open tube base with stainless steel legs and an 18 gauge stainless steel full length undershelf. Each table shall be mounted on 5" diameter all swivel casters, two with brakes. Casters shall be mounted on the standard legs so the stands are approximately 30" high. Specifications are based on Advance Tabco Model #MT-SS-302 tables with #TA-25 casters.

4.23 #20 Storage Shelving System

Contractor Furnished - Contractor Installed

Storage shelving system shall have fixed shelving units at each end and in the center and a total of eight mobile shelving units between, guided by overhead tracks. All fixed and mobile shelving units shall have five equally spaced shelves measuring 21" x 72". Shelves shall be constructed of welded type 302 or 304 stainless steel wire. Shelves shall have #9 wire ribs running front to back on 13/16" centers, with #6 wire support ribs located on 8" centers and corrugated reinforcement on all four sides. Welded into each corner shall be a stainless steel tapered collar shaped and sized to fit the post and inner tapered split sleeve. Vertical support posts shall be stainless steel and shall be 1" diameter with rolled circular grooves 1" apart along their length. Shelf shall be mounted to post by means of a 2 piece plastic split sleeve snapped around the post at the desired shelf height, with the resultant tapered surface contacting the matching tapered collar in the shelf corner.

Each fixed section of shelving shall have stationary unit kits with the hardware necessary for connecting to the top tracks. Each fixed section shall have four 86" posts which shall be secured and sealed to the floor. Spanning between the fixed shelving units shall be 6063-T6 aluminum extruded overhead track sets. Each mobile section of shelving shall have a mobile unit kit consisting of posts, casters/caster channels, donut bumpers and roller bearing assemblies to fit in the top tracks. Casters shall have a 5" diameter polyolefin wheel with offset stainless steel rigid horn and stainless steel prelubricated ball bearings. Shelving units shall be arranged as shown on drawing. Specifications are based on InterMetro Super Erecta shelving and Top-Track high density shelving systems.

4.24 #21 Tables with Sink

Contractor Furnished - Contractor Installed

Work tables shall be the size, shape and arrangement shown on drawing, measuring overall approximately 72" long x 30" wide x 35-1/2" high to working level. The top shall be constructed of 14 gauge stainless steel with all edges formed down 2" square. The top shall be depressed 3/16" with a 3/4" wide rim on all sides. Welded integrally into top of each table at one end as shown on drawing shall be a sink insert measuring inside approximately 16" x 20" x 12" deep. Sink shall be fitted with a twist handle drain with overflow. A 14 gauge stainless steel tab shall be stud bolted to the bottom of the sink to support the drain handle. Mounted to top and centered behind sink shall be a deck mounted faucet with goose neck spout as specified in Section 2. Mounted to the underside of the top on the opposite end of the table shall be a deluxe drawer assembly with stainless steel front, ball bearing slides and a removable stainless steel insert measuring 20" x 20" x 5" deep. Mounted to the top of each table shall be a utensil rack specified under Item #26. Top shall be mounted to an open tube base with stainless steel legs and an 18 gauge stainless steel full length undershelf. Specifications are based on Advance Tabco Model #VSS-306 tables with a Model #TA-11B sink and a Model #SS-2020 drawer.

4.25 #22 Meat Slicing Machines

Government Furnished - Government Installed

Each slicer shall be a gravity feed six speed automatic slicer measuring overall 29-5/16" wide x 27-1/4" deep x 27-3/4" high. Slicers shall have a one piece seamless burnished aluminum base. The plastic external parts shall have antimicrobial protection. Knife, knife guard, carriage and gauge

plate shall be constructed of stainless steel. Slicers shall have a 11-3/4" diameter stainless steel hollow ground knife with a sanitary hub. Slicers shall have a built-in two stone knife sharpener mounted on top of the knife. Slicers shall have a removable, tilting, angle feed carriage which will handle food up to 12" in width or 7-1/2" in diameter. The carriage shall have a heavy thermoplastic covered steel feed grip and a stainless steel adjustable fence. Carriage slide mechanism shall be equipped with an oil reservoir. Slicers shall have an adjustable slice thickness of 0" to 1-1/4". Slicers shall be wired 120-60-1 phase and shall have an electrical cord and plug. Slicers shall have a 1/2 horse power totally enclosed motor with permanently lubricated ball bearings and poly V-belt drive system. Slicers shall be furnished with a lift lever to facilitate cleaning. Specifications are based on a Hobart Model #2912 slicer.

4.26 #23 Vegetable Peeling Machine
Contractor Furnished - Contractor Installed

Vegetable peeler shall have a capacity of 50 to 60 pounds of potatoes peeled in 1 to 3 minutes. Peeler shall measure 21" in diameter x 62-3/16" high overall. Peeler shall have a stainless steel cylinder with abrasive permanently bonded on interior surface of peeling hopper. Hopper shall have a gray molded plastic removable cover. Peeler shall have a quick opening removable aluminum hopper door with a positive cam type pressure lock and a cast aluminum discharge chute. The discharge chute shall overhang the rim of the adjacent sink. Bottom of hopper shall have a removable 20-1/2" diameter fiberglass reinforced plastic abrasive disc with the silicon-carbide abrasive permanently bonded to the disc. Peeler hopper shall have an air gap type water inlet mounted above the unit.

Peeler shall be wired 208-60-3 phase and shall have a 1 HP capacitor start induction run motor with manual reset overload protection and grease-packed ball bearings. Peeler disc shall be mounted on a stainless steel drive shaft rigidly mounted on grease-packed ball bearings. Motor shall drive the shaft by means of a multi-grip poly V-belt which shall be adjustable from outside the machine. Peeler shall have a synchronous timer adjustable from 1/2 minute to 4 minutes. The timer shall be located on the working side of the peeler.

Peeler shall be mounted on a disposer stand with stainless steel legs and four bolt-down adjustable leveling feet. Disposer stand shall be complete with a 1-1/4 HP disposer wired 208-60-1 phase. Disposer shall be constructed by the same manufacturer as the peeler. Disposer shall have a long upper housing. Stand shall have a solenoid water control valve and air gap type inlet. Specifications are based on a Hobart Model #6460-T peeler with a Model #FD3-125 disposer.

4.27 #24 Waste Pulpers
Contractor Furnished - Contractor Installed

Each pulping system shall be a close-coupled pulper with extractor. Pulping system shall have a capacity of 1,000 pounds per hour of foodservice waste mix including food scraps, plastic flatware, paper, milk cartons, Styrofoam, aluminum foil, aluminum cans, cardboard, polyethylene bags and all types of plastic containers and packaging. Pulper shall have a 25-1/2" diameter, 36" high polished stainless steel tank with stainless steel hinged lid with proximity switch. Unit shall have a horizontally mounted pulping and pumping system integrated with one 6 HP TEFC motor rubber isolated from the frame, shell and tray. Drive system and water manifolds shall be totally enclosed with stainless steel shrouds. Pulping system

shall be mounted on 6" high stainless steel legs. Pulper tank shall have a 9" wide x 6-3/4" high centerline feed trough connection oriented as shown on plan. Pulper shall include a 1-1/2" feed trough nozzle at the end of the scrapping trough of Item #101. Each pulper shall also include three gusher heads mounted in the rear side of the scrapping trough at the three scrapping stations as shown on plan. Pulper shall have an investment cast Type 316 stainless steel pulper tank, investment cast 17-4 stainless steel security ring and rotating blade, three replaceable stationary blades on the security ring and stainless steel impeller with replaceable stainless steel pumping vanes. Pulper shall have a one piece rotating blade hardened to 46 Rockwell C which shall be easily sharpened.

The extractor section shall have a rigid stainless steel weldment with polished exterior, stainless steel legs, head assembly with 2 HP TEFC drive motor mounted to a 20:1 gear reducer, 17" long stainless steel discharge chute with hinged lid and proximity switch, 3 HP TEFC recirculation pump and a chemical additive pump. Water extraction components shall include a 6" diameter stainless steel screw with nylon brush edge, matching reinforced stainless steel screen and a stainless steel plug cutter.

Pulping system shall be furnished with a valve package consisting of all valves required for proper operation (fresh water, trough flush and drain line). System shall include pre-piped bronze valves mounted on manifolds which shall be completely enclosed in stainless steel shrouds.

Pulping system shall include a UL approved stainless steel NEMA 4 electrical control panel mounted to the wall as shown on plan. Control panel shall include all necessary power, control and water level controls prewired to a terminal strip. Control panel shall include a push button station. Pulping system shall include an automatic fill cycle.

Pulping system shall be wired 480-60-3 phase and shall have a total load of 20.0 amps. Pulping system shall be installed as shown on plan and connected to the trough of the tray accumulator. Piping shall be extended from the pump outlet to the trough inlets and gusher heads with a ball valve installed at each inlet. All piping shall be located up behind trough to allow access to base of accumulator. Pulping system shall include the services of a factory-trained service engineer for a one day trip to review the installation of the system and instruct the owner's personnel in its proper operation and maintenance. Pulping system shall include all standard equipment. Specifications are based on a Somat Model #SPC-60S with trough connection.

4.28 #25 Food Processor Government Furnished - Government Installed

Food processor shall be a counter model continuous feed unit measuring approximately 8-1/2" wide x 18-1/4" front to back x 20-1/2" high. Unit shall have a motor base unit with the top tilted slightly forward. Unit shall have a hinged metal feed hopper lid with two feed openings with feed pushers. Food processor shall have a wiper arm ejector system to eliminate clogging. Unit shall have a 1/2 horsepower motor and a poly V belt drive transmission. Food processor shall be wired 120-60-1 phase with an electrical cord and plug. The food processor shall be equipped with:

- (1) 1/8" slicing plate
- (1) 3/16" slicing plate
- (1) 5/16" slicing plate
- (1) 3/8" dicing grid
- (1) 1/8" grating plate

(1) 3/16" grating plate

A plate holder shall be provided to hold each cutting plate. Specifications are based on a Mannhart Model #M2000 food processor.

4.29 #26 Pot Racks

Contractor Furnished - Contractor Installed

Utensil racks shall be mounted on the work tables with sink, Item #21 and shall be constructed by the same manufacturer. Each rack shall be a mid-mount unit installed at the end of the top as shown on plan. Racks shall be 48" long and the top shall be at 84" above the floor. Racks shall consist of two 1-5/8" diameter stainless steel posts with a pot rack mounted at the top and a utensil rack mounted below. Posts shall be closed at the top and shall extend down through the top and be secured to the undershelf below. Where the posts penetrate the table top, the top shall be die formed up tight around the posts. The pot racks and utensil racks shall be constructed of 2" x 3/16" stainless steel bars. The pot racks shall be a 22" wide rectangle with radius corners. The utensil racks shall be a straight bar extending from post to post. Each end of the pot racks and utensil racks shall have a stainless steel gusset with set screw so that they are adjustable in height. Each pot rack shall be furnished with sixteen plated pot hooks and each utensil rack shall be furnished with eight hooks. Specifications are based on Advance Tabco Model #TA228 mid mount units with Model #SCT-48 pot racks and Model #AUR-48 utensil racks.

4.30 #27 Range

Contractor Furnished - Contractor Installed

Range shall consist of a heavy duty four open burner natural gas fired unit with standard oven base with an additional open burner range attachment on the right end. The overall dimensions shall be 51" wide x 38" deep x 53-3/8" high. The exterior front, front rail and each end shall be stainless steel. The range shall be equipped with a 10" high back guard with stainless steel finish on front, sides and rear. The top shall be equipped with six 35,000 BTU/HR two piece gas burners with lift-off heads. Each burner shall be equipped with an electric spark ignition with total flame failure protection on all burners. Range shall be wired 120-60-1 phase with a cord and NEMA #5-15P plug. The two range sections shall be manifold together with a common front rail. Range shall be furnished with a 3/4" rear gas connection and a gas pressure regulator. The ends of the front manifold shall have caps and stainless steel covers. Range shall have three lift-off heavy duty cast iron top grates 17" wide x 27" deep. Range shall have a removable ring grate bowl over each burner. The oven base shall have a porcelain interior and two oven racks. Oven shall have a 40,000 BTU/HR gas burner with piezo spark ignition. Base below range attachment at the right end shall have a storage base with stainless steel front hinged door and stainless steel interior shelf. Range shall be mounted on one set of four 5" diameter polyurethane all swivel casters with brakes on the front two. The range shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. The specifications are based on Garland Model #MST44RE with a Model #MST4S-E attachment.

Furnished with the range shall be a flexible gas connector assembly in accordance with Detail #A4/QF502. Connector shall have a 1" x 48" long hydroformed corrugated stainless steel hose with inline braiding and covered with a yellow plastic cover in accordance with ASME standards. The flexible gas connector shall be ANSI Z21.69 design certified. The flexible hose shall be equipped with two swivel connector fittings, a reverse quick

disconnect and a 360 degree rotatable hex nut connector fitting. Quick disconnect shall be on the supply end of the hose. The flexible connector shall be furnished with a coiled restraining device with installation hardware. The flexible connector, fittings and the restraining device shall be equipped with the manufacturer's standard equipment and shall be in accordance with the manufacturer's standard specifications. Specifications are based on T&S Model #HG-6E-48SK.

4.31 #28 Braising Pans

Contractor Furnished - Contractor Installed

Each braising pan shall be an open leg, natural gas heated, manual tilting unit measuring overall 51" wide x 41" deep x 39" high. The rim of the pan shall be no more than 35" above the floor. Braising pan body shall be 12 gauge type 304 stainless steel, solid one piece welded construction with interior dimensions of 36-1/2" wide x 28-3/4" front to back x 9-1/2" deep. Braising pans shall have a 40 gallon capacity. Interior of pan shall have a bead blasted finish. The cooking surface shall have a 5/8" thick steel clad bottom with a 1/16" stainless steel plate. Braising pans shall have a forced air burner system with two power settings rated at 160,000 and 200,000 BTU/HR, electronic spark ignition and a gas pressure regulator. Unit shall be wired 120-60-1 phase with cord and NEMA #5-15P plug. Each unit shall have an adjustable electronic thermostat with settings from 100 degrees F. to 450 degrees F. Braising pans shall have splash proof controls. Braising pans shall have a manual tilt mechanism with a crank handle on the right side. Units shall be able to be tilted up to 10 degrees without the power being turned off. Braising pans shall have a spring assisted cover with vent, gallon/liter markings on the interior of the pan and a 2" tangent draw-off valve with removable strainer at the left front corner. Braising pans shall be mounted on a stainless steel open tube base with stainless steel adjustable feet. Braising pans shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Braising pans shall be by the same manufacturer as the kettles on the project. Specifications are based on Cleveland Model #SGL-40T1 braising pans.

4.32 #29 Central Pressure Cleaning System

Contractor Furnished - Contractor Installed

Wall mounted pressure cleaning system shall consist of a wall mounted central pump and chemical injection station located in the janitor closet and five remote wash stations as shown on plan. One remote station shall be to the right of the door into the paper storage room, one station shall be in the pot and pan washing area near the door to the COM room, one station shall be in the corner of the kitchen near the door into the issue freezer and one shall be in each dishwashing area. The pressure cleaning system shall be in accordance with the piping schematic shown on Detail #C4/QF504.

The central station shall be housed in a stainless steel case measuring 17-1/4" wide x 23" front to back x 15-1/4" high which shall be mounted to the wall as shown on plan with the bottom at 4'-6" above the floor. Central station shall be wired 208-60-1 phase and shall have a 2 H.P. totally enclosed, fan-cooled motor with ball bearings. Central station shall have a three cylinder direct drive plunger type pump with a capacity of 2.9 G.P.M. and adjustable pressure up to 850 P.S.I. at the pump head. Central system shall be complete with oil gauge, pressure gauge, anti-backflow protection, anti-syphon protection, thermal limit switch, water level float switch, master on-off rocker switch, 30 minute run timer and pressure relief unloader. System shall have a master control panel with 24 volt lead and

time delay relay. Central system shall have chemical injection before the pump with two chemical metering solenoids, one for soap and one for sanitizer. Central system shall include stainless steel wall mount brackets with gun hanger, wall mounted chemical jug racks and 6' water supply hose.

Each of the five remote wash stations shall have a surface mount remote control panel. Stainless steel remote panels shall measure approximately 8-1/2" wide x 2" deep x 6-1/2" high and shall be mounted to the building wall at 5'-0" above the floor. Remote panels shall have an on-off switch and a three position switch for soap, sanitize and rinse. Remote panels shall have a quick disconnect pressure hose coupling on the bottom. The stainless steel pressure tubing and electrical control wires shall be recessed in the building wall and shall enter the remote panels through the rear.

Piping and control wiring from the central station to the five remote wash stations shall be furnished and installed by the contractor furnishing the equipment who shall be responsible for the operation of the entire system. The wiring shall be 5 conductor double insulated 24 volt control wire. The piping shall be 3/8" stainless steel beverage tubing. Wiring shall be run with the piping and they shall be taped together. Piping shall be secured with insulated clamps every 2 feet. Wiring and piping shall be run on the wall in the non food storage room and then up above the ceiling. The wiring and piping at the remote wash control stations shall be concealed inside the wall.

Furnished with the pressure cleaning system shall be a high pressure hose reel on a portable cart. Hose reel shall be a manual rewind unit with 125' hose capacity, swivel hand grip, double sealed precision ball bearings and a silver powder coated finish. Hose reel shall be mounted on a chrome plated portable cart with a handle and 10" diameter semi-pneumatic wheels. Hose reel shall be furnished with a 100' long 3/8" high pressure hose with a swivel at the gun attachment end. Hose shall be furnished with a 36" spray gun assembly with a dual nozzle spray head for automatic soap/rinse selection at spray gun. The hose reel shall have a 12' long inlet hose with a quick disconnect coupling to fit the remote water outlet station.

The pressure cleaning system shall be furnished with all accessories and parts to provide a complete operating system. Specifications are based on a Spray Master Technologies Model #SMT-600WCY central system with Model #300-1698 remote control panels and a Model #SMT-300-PHR-C hose reel cart.

4.33 #30 Floor Troughs with Grates Contractor Furnished - Contractor Installed

Floor troughs with grates shall be 30" long x 30" wide x 6" deep and shall be located as shown on plan. Troughs shall be in accordance with Detail #C3/QF503. Troughs shall be constructed of 14 gauge, type 304, 18-8 stainless steel polished to a #4 finish. Each trough shall have coved corners and all joints and seams shall be integrally welded, ground and polished. Troughs shall have a 1-1/2" wide integral flange around the perimeter and a 1" wide integral anti-spill ledge to support the grate at the front and rear. Troughs shall be set into the floor with the flange and grate flush with the surrounding floor level. Troughs shall have a 3" waste connection and shall be complete with an integrally welded stainless steel sump drain with removable stainless steel sediment basket. Each floor trough shall be furnished with two equal length sections of removable stainless steel subway type grate. Each grate shall have 3/16" x 1" bearing bars running from front to rear to reduce splash. Specifications are based

on IMC/Teddy Model #ASFT drain troughs with #SG grates.

4.34 #31 Freezer

Contractor Furnished - Contractor Installed

Freezer shall be a three section reach-in unit with 79 cubic feet capacity, constructed by the same manufacturer as all other refrigerators and freezers on the project. Freezer shall be constructed of stainless steel on the front, doors, sides, and interior. Freezer shall have a stainless steel finished panel covering the entire rear including the upper condensing unit housing. The freezer shall measure overall 86-1/8" wide x 35" deep x 83-1/4" high including 6" high stainless steel legs with adjustable feet. Freezer shall have half height doors hinged as shown on the plan with self-closing, gravity action, cam-lift hinges. The doors shall have a 120 degree stay open feature. The doors shall have a removable vinyl magnetic gasket and the door frame shall have anti-condensate heaters. The horizontal door handles shall be mounted over a recess in each door. Each door shall be equipped with a cylinder lock and key. The door hinges shall include a switch to automatically activate the interior incandescent lighting. The freezer cabinet and doors shall have non CFC foamed-in place polyurethane insulation. The interior shall be equipped with a total of fifteen chrome plated wire shelves.

The refrigeration system shall be a top mounted self-contained unit consisting of a 1 HP condensing unit wired 120-60-1 phase. The refrigerant shall be R404a. Refrigerant shall be controlled by a thermostatic expansion valve. The freezer shall be equipped with an electrical cord and NEMA #5-20P plug. The freezer controls shall feature 3 digit LED display, temperature monitoring, internal time clock, 72 hour data storage and display capability of Fahrenheit or Centigrade temperatures. The control shall have visual and audible alarm warnings for hi/lo cabinet temperature, evaporator coil sensor failure, clogged filter-clean condenser, discharge line sensor failure, power supply interruption and door open cycles and times. The freezer shall be furnished with a one year refrigeration service policy on a local level. The freezer shall be equipped with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. The specifications are based on a Traulsen Model #RLT332WUT-HHS.

4.35 #32 Convection Ovens

Contractor Furnished - Contractor Installed

Convection ovens shall each be a double deck natural gas fired baking and roasting oven. The overall dimensions shall be 38" wide x 44" deep x 70-5/8" high. Ovens shall be mounted on 5" diameter polyurethane all swivel casters with brakes on the front two. Interior of each oven shall be 29" wide x 28-1/4" deep x 20" high and shall accept standard 18" x 26" full size sheet pans in left-to right or front to pack positions. Each oven shall be constructed with an angle iron frame. Exterior front, top, and each side shall be #3 finish stainless steel. Each oven shall be furnished with a stainless steel solid back panel covering the upper and lower decks. Interior of each deck shall have a 14 gauge double sided porcelainized compartment liner. Combustion chamber shall be aluminized steel. The combining of superheated air and oven temperature air shall be accomplished by means of a double inlet blower wheel located behind the oven compartment baffle prior to entering the baking chamber. The oven shall be insulated with high temperature mineral fiber sheets with 1" thickness on the top, back and sides and 1/2" thickness on the bottom. A single handle mounted on left hand door shall open and close both doors simultaneously to the side

with a 140 degree total opening angle. Doors shall have dual pane thermal glass windows encased in stainless steel door frames and shall be independently mounted on 1/4" x 1" steel support arms. The door operating mechanism shall be furnished with double oil impregnated bronze bushings for each door. The interior of each oven shall be fitted with removable chrome plated rack supports with a capacity of eleven racks on 1-5/8" spacing. Each oven deck shall be furnished with five chrome plated wire racks.

Temperature shall be controlled by means of an infinitely variable solid state thermostat controlling gas by means of a solenoid valve. The direct ignition of the main burner shall be by means of an electronic silicone carbide igniter in conjunction with safety thermal delay relay. A standing pilot ignition shall not be acceptable. Each deck shall have two removable dual tube burners with a rated total input of 60,000 BTU/HR. Each oven deck shall be provided with a gas pressure regulator and manual front accessible gas shut-off valve. Each deck shall be provided with a 1/3 HP two speed blower motor wired 120-60-1 phase with automatic thermal overload protection and electrical cord and NEMA #5-15P plug. The interior of each oven shall be fitted with two 50 watt commercial bake oven lamps. Oven shall be AGA design certified, NSF listed and CGA approved.

Each oven compartment shall be equipped with a solid state digital control panel with digital display, solid state timer, two speed fan, cook and hold feature, and fan pulse feature. Control panel shall also have an infinitely variable solid state thermostat with a 200 degrees to 500 degrees F. range. All controls shall be contained in a channel mounted drawer that pulls out for servicing or adjustment from the front of the oven and provides a 100% electrical disconnect when it is pulled out. Each oven deck shall have a selector switch for cool-down mode, oven shut off, high speed cook position and low speed cook position. Each deck shall also have a light switch and a door interlock switch to shut off blower when doors are open. Convection ovens shall be equipped with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Specifications are based on Blodgett Model #DFG-200 double deck ovens.

Each double deck oven shall have the gas connections for the upper and lower deck manifold together under the plumbing sections of the contract documents. Furnished with each double deck oven shall be a flexible gas connector assembly in accordance with Detail #A4/QF502. Connectors shall have a 3/4" x 48" long hydroformed corrugated stainless steel hose with inline braiding and covered with a yellow plastic cover in accordance with ASME standards. The flexible gas connectors shall be ANSI Z21.69 design certified. Each flexible hose shall be equipped with two swivel connector fittings, a reverse quick disconnect and a 360 degree rotatable hex nut connector fitting. Quick disconnect shall be on the supply end of the hose. Each flexible connector shall be furnished with a coiled restraining device with installation hardware. The flexible connectors, fittings and the restraining devices shall be equipped with the manufacturer's standard equipment and shall be in accordance with the manufacturer's standard specifications. Specifications are based on T&S Model #HG-6D-48SK.

4.36 #32a Not Used

4.37 #33 Can Openers

Government Furnished - Government Installed

Can opener shall be an electric counter top unit mounted in a stainless steel rectangular housing with rubber feet. Height of can opener shall be

designed to accommodate #10 cans. Unit shall be wired 120-60-1 phase with a cord and plug and shall have two speeds. Unit shall have a single handle on the top with a spring loaded mechanism to open dented cans and shall have a replaceable knife and gear. Specifications based on Edlund Model #203.

4.38 #34 Mixing Machines

Contractor Furnished - Contractor Installed

Each mixer shall be a 60 quart capacity floor type mixer. Mixer shall have a 2.7 HP high torque switched reluctance motor built by the mixer manufacturer and designed especially for this mixer. The motor shall have grease packed ball bearings and a ventilated splash proof enclosure. Mixer shall be wired 208-60-3 phase and shall be U.L. listed. The mixer shall have a magnetic contactor with automatic resetting thermal overload protection internally mounted. Mixer shall be fitted with internally sealed start-stop and power bowl lift buttons and a 50 minute timer which automatically remembers the last time setting for each speed. Mixer shall have a 5.4 HP rated poly V-belt to transfer power from the motor to the input shaft of the transmission. Mixer shall have a gear transmission with constant mesh helical gears of hardened alloy steel with ball bearings. Circulating oil and grease lubrication shall be furnished to all gears. Mixer shall have four (4) fixed agitator speeds and one stir speed, with stir speed at 36 RPM, speed #1 at 67 RPM, speed #2 at 120 RPM, speed #3 at 200 RPM and speed #4 at 353 RPM. Mixer shall be capable of changing speeds while unit is running. Mixer shall be equipped with a #12 tapered attachment hub mounted on the front. Mixer shall be supplied in a metallic gray polyurethane enamel finish. Mixer shall have a swing out bowl with power bowl lift and a rotating bowl guard.

Supplied with this mixer shall be:

- (1) 60 quart stainless steel bowl
- (1) 60 quart flat beater
- (1) 60 quart stainless steel wire whip
- (1) 60 quart dough hook
- (1) 60 quart bowl scraper
- (1) 60 quart bowl truck
- (1) 60 quart ingredient chute

Mixer shall be supplied with a one year warranty on parts, labor and mileage against manufacturer's defects. Mixer shall also be listed by National Sanitation Foundation and shall be certified by the Baking Industry Sanitation Standards Committee. Specifications are based on a Hobart Model #HL600 Legacy mixer.

4.39 #35 Mixing Machine

Government Furnished - Government Installed

Mixer shall be a 20 quart counter type mixer wired 120-60-1 phase with a cord and plug. Mixer shall measure overall 16-1/2" wide x 22-7/8" deep x 29" high. Mixer shall have a 1/2 horse power motor designed and built by the mixer manufacturer. Mixer shall have a 15 minute timer. Mixer shall have a fixed three speed transmission with heat treated alloy steel constant mesh gears and ball bearings. Mixer shall have a tapered attachment hub mounted on the front of the unit. Mixer shall have a hand lever type spring counter balanced bowl lift mechanism. Mixer shall have a 20 quart stainless steel swing out bowl with a rotating bowl guard. Mixer shall be finished with metallic gray polyurethane enamel. Mixer shall be furnished with one 20 quart stainless steel bowl, one aluminum flat beater one stainless steel wire whip and one ingredient chute to fit on the bowl

guard. Specifications are based on a Hobart Model #HL200 mixer.

4.40 #36 Kettles

Contractor Furnished - Contractor Installed

Each kettle shall be a natural gas fired, 2/3 steam jacketed, stationary kettle with a capacity of 60 gallons. Kettles shall measure overall 34-1/4" wide x 39" deep x 43-1/2" high to top of rim. Kettle shall have type 304 stainless steel interior and exterior and shall be mounted on four stainless steel legs with adjustable flanged feet. Kettle shall have a spring assisted stainless steel dome shaped cover hinged on the rear, with drop type handle and insulated knob. Kettle shall have a splash proof stainless steel control panel on the right with temperature control, on-off switch and LED indicators for heat cycle and low water warning. Steam jacket shall have a 50 PSI pressure rating with safety valve and pressure gauge and shall be permanently filled with treated distilled water. Interior of kettle shall have etched graduation marks at 5 gallon intervals. Kettle shall be furnished with a 2" tangent draw-off valve with drain strainer. Each kettle shall be furnished with a hot and cold water faucet with swing spout and mounting bracket which shall be located on the left side.

Kettle shall have a gas heating system with 190,000 BTU/HR input, electronic spark ignition and a gas pressure regulator. Kettle shall have an operating temperature range of 145 to 260 degrees F. with a temperature variance of less than 2 degrees F. Kettle shall be wired 120-60-1 phase and furnished with a cord and NEMA #5-15P plug. Kettle shall be NSF listed and AGA design certified. Kettle shall be by the same manufacturer as the other kettles and braising pans on the project. Specifications are based on a Cleveland Model #KGL-60.

4.41 #37 Not Used

4.42 #38 Kettles with Stand

Contractor Furnished - Contractor Installed

Unit shall consist of two 12 gallon self-contained electric heated 2/3 steam jacketed tilting kettles with a shared center console and a stand. Kettles shall be constructed of type 304 stainless steel with a #4 finish on the interior, exterior and support console. Each steam jacket shall have a 50 PSI pressure rating with rear mounted safety relief valve and pressure gauge and shall be permanently filled with treated distilled water. The electric elements shall be wired 480-60-3 phase with one electrical connection for both kettles. Kettle console shall have a splash proof solid state temperature and low water safety control system with L.E.D. indicators in a plug-in module. Kettles shall have an operating temperature range of 145 to 260 degrees F. with a temperature variance of less than 2 degrees F. The kettles shall have manual tilt with balanced design. Each kettle shall be equipped with a lift off stainless steel cover. Mounted to the rear of the center console shall be a hot and cold water faucet with mounting bracket. Faucet shall have a swing spout sized to reach both kettles. The kettles shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Kettles shall be by the same manufacturer as the other kettle and braising pans on the project.

Kettles shall be mounted on a stainless steel open stand with two removable drain drawers. The stand frame shall be constructed of 1-1/4" square stainless steel tubing. The stand shall measure overall 54-3/4" wide x

21-3/8" front to back x 17-5/8" high. The stand shall measure 40-1/4" front to back with the drain drawers fully extended. The stand shall be equipped with two stainless steel removable combination drain drawers and pan supports with stainless steel splash screen in the bottom of each. Each drawer shall have a tilt-up splash shield/pan support. The legs shall be equipped with adjustable feet and the rear feet shall be flanged and shall be secured and sealed to the building floor. The drawer shall drain into a trough running from the front to the back of the stand. Drain from the trough shall be extended to the funnel strainer of the floor sink below. The stand shall be furnished with the manufacturer's standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Specifications are based on a Cleveland Model #TKET-12-T twin kettle and a Model #ST-55-T stand.

4.43 #39 Exhaust Hood, Island Type
Contractor Furnished - Contractor Installed

Exhaust hood shall consist of six island style hood sections installed as indicated on the plan, measuring overall approximately 28'-0" long x 2'-0" high x 12'-8" front to back. Hood shall be in accordance with Detail #B1/QF502. Three hood sections on one side shall be installed back to back with three hood sections on the other side with a spacer in the center above the partial height wall. Each hood section shall be approximately 9'-4" long x 5'-6" wide x 2'-0" high. Each section shall include an integral 3" air space on the rear. Exhaust hood shall have ultra violet light source technology for cleaning the hood interior. Each section shall have slanted stainless steel removable grease extracting cartridges with removable stainless steel separator filters behind. Six tube cassettes of UVC lights shall be mounted on the rear vertical face of the exhaust plenum behind the extractor cartridges and separator filters. Each extractor cartridge shall have a series of vertical compartments with an entrance on the upper side on the front face and an exit at the bottom on the rear. Air shall enter the cartridge at the top, spin in a cyclonic motion down through the cartridge and out the rear side at the bottom. Cartridges shall be over 90% efficient in removing particles between 5 and 10 microns. The separator filter behind the cartridges shall remove additional smaller grease particles. The UVC light shall break down the grease molecule bond and the O3 discharged from the lights shall oxidize the grease molecules into H₂O, CO₂ and microscopic dust. There shall be no grease build-up in the exhaust plenum, duct work, or exhaust fan.

Exhaust hood shall be constructed in compliance with NFPA #96, International Mechanical Code and ACGIH (American Conference of Governmental Industrial Hygienists). The exhaust hood shall be NSF approved and shall have a "U.L. Listed Without Damper" label. Exhaust hood shall be installed with the bottom edge at 6'-8" above the floor. Exhaust hood shall be constructed of 18 gauge type 304 stainless steel with a #4 finish. All joints shall be welded and/or liquid tight and all welds shall be ground smooth and polished to the original finish. Top of exhaust plenum shall have a stainless steel all welded exhaust duct collar with a 1" connection flange. Each section of the UV hood shall have a separate exhaust collar. Exhaust requirements for the hood shall be in accordance with the manufacturer's recommendation and their UL Listing. Spacer between hood sections shall be constructed of 18 gauge stainless steel and shall extend between the rear edges of the hood sections at the bottom and both ends. Hood shall be centered above the 56" high wall as shown on plan. Exhaust hood shall be furnished with all necessary hanger rods and shall be suspended from building structure above. Hood shall be supplied with stainless steel closure channels on front and both ends as required to

close the gap between the top of the exhaust hood and the finished ceiling.

Each hood section shall have an integral tempered make-up air supply system consisting of duct collars, plenums and air diffuser baffles. This supply air chamber shall have stainless steel removable perforated panels on external face of hood for low velocity discharge of air into kitchen. The top of the make-up air plenum on each hood section shall have a stainless steel duct collar sized in accordance with the manufacturer's recommendation and their UL Listing.

Exhaust hood shall be complete with a control panel wired 120-60-1 phase with an exhaust fan on/off switch, alarm reset push button, alarm buzzer and lamps to indicate power on, maintenance required and light safety shut down.

Interior of each exhaust hood section shall be supplied with a total of four vapor proof light fixtures, each with a 26 watt compact fluorescent bulb and a vapor proof globe. Light fixtures shall be wired 120-60-1 phase. All light fixtures shall be wired in a concealed manner to a junction box on top of the hood for connection to the light switch mounted in the building wall. This hood shall otherwise be in accordance with the manufacturer's standard specifications. All exhaust hoods throughout the project shall be by the same manufacturer. Specifications are based on a Caddy Model #SH-BCU-I-PA-I exhaust hood.

4.44 #39a Exhaust Hood, Wall Type
Contractor Furnished - Contractor Installed

Exhaust hood shall consist of two wall mount hood sections installed as indicated on the plan, measuring overall approximately 24'-0" long x 2'-0" high x 5'-0" front to back. Hood shall be in accordance with Detail #B4/QF502. Each hood section shall measure approximately 12'-0" long x 5'-0" wide x 2'-0" high. Each section shall include an integral 3" air space on the rear. Exhaust hood shall be installed with the bottom edge at 6'-8" above the floor. Exhaust hood shall be the same as specified for Item #39 including the same ultra violet light technology, materials, construction, cartridges, code approvals, hanger rods, closure panels, make-up air plenum, control panel and lights. All exhaust hoods throughout the project shall be by the same manufacturer. Specifications are based on a Caddy Model #SH-BCU-PA-I exhaust hood.

4.45 #40 Floor Troughs with Grates
Contractor Furnished - Contractor Installed

Floor troughs with grates shall be the same as specified for Item #30 except they shall be 18" x 18". Troughs shall be in accordance with Detail #A1/QF503. Each trough shall have a one piece grate.

4.46 #41 Fire Suppression System
Contractor Furnished - Contractor Installed

Fire suppression system shall serve exhaust hood, Item #39 and the equipment below it. System shall be a liquid agent fire suppression system with a stainless steel cabinet mounted on the wall near the ceiling as shown on plan. No conduit or piping shall be exposed to view. The fire suppression system shall be a U.L. Listed liquid agent, cartridge operated, regulated pressure system with a fixed nozzle agent distribution network. The system shall be capable of automatic detection and actuation with local or remote manual actuation. Fire suppression system shall be provided with

a remote manual pull station recessed in the wall on the exit path from the area. The fire suppression system shall be complete with all necessary duct, plenum and surface protection nozzles as required by Code. The system shall be a multiple system with capacity properly sized for the nozzles required. The extinguishing agent shall be a potassium carbonate, potassium acetate-based formulation designed for flame knock down and securement of grease related fires. The regulated release mechanism shall be a spring loaded mechanical/pneumatic type with a nitrogen cartridge for providing the expellant gas supply to the liquid agent tanks. The regulated release mechanism shall contain a factory installed regulator set at 100 PSI. The mechanism shall have a visual indicator of the cocked or fired position without having to open the enclosure. The fire suppression system shall have an automatic fusible link detection system. The fire suppression system shall also have a mechanical gas valve and a microswitch to allow the shut-off of all gas and electricity for the items below the exhaust hood. Shut-off devices shall be furnished and installed under the plumbing and electrical sections of the contract documents. All piping and the conduit for fusible link detection system shall be concealed inside the exhaust plenum and above the hood as much as possible. Any exposed piping for this fire suppression system shall be chrome plated or chrome sleeved. The fire suppression system shall be installed in accordance with the Underwriter's Laboratories Listing, NFPA 96 and NFPA 17A and shall conform to all local authorities having jurisdiction over this fire suppression system. Upon completion of the installation of the fire suppression system, a qualified fire suppression installer shall inspect the system and certify in writing that this system meets all applicable Codes. Specifications are based on an Ansul Model #R-102 system.

4.47 #41a Fire Suppression System
Contractor Furnished - Contractor Installed

Fire suppression system shall serve exhaust hood, Item #39a and the equipment below it. System shall otherwise be the same as specified for Item #41.

4.48 #42 Fryers and Filter
Contractor Furnished - Contractor Installed

Fryers with filter shall consist of three fryers joined together in a battery with a central filter system at the left end. All fryers throughout the project shall be by the same manufacturer. Unit shall measure overall 101-1/2" wide x 42-5/8" front to back x 46-1/2" high. Each fryer shall have a capacity of 130 pounds of oil and shall have the capability of cooking up to 200 pounds of frozen french fries or 250 pounds of chicken per hour. Each fryer shall have a stainless steel fryer vessel, heat transfer tubes, splash deck, splash back and flue deflector installed in a cabinet base. Fry vessel shall have seamless corners and shall be drawn from 18 gauge stainless steel with five 18 gauge stainless steel heat transfer tubes. Fryer vessel and heat transfer tubes shall be polished to a #7 mirror finish. Splash deck shall be constructed of 18 gauge stainless steel and shall slope toward the fry vessel. It shall have 4" high vertical sides to prevent boil-over. Cabinet shall be constructed of 18 gauge stainless steel on sides and rear with 22 gauge stainless steel door.

Each fryer shall be natural gas fired with an input of 167,500 BTU/HR. Each fryer shall include a melt cycle for solid shortening and electric spark ignition. Each fryer shall have indicator lights and two digital solid state timers. Fryers shall have a thermostat with stainless steel bulb, accurate to 3 degrees, from 300 to 350 degrees F. Each fryer shall have a

manually resettable high limit control with stainless steel bulb and a safety test switch on the control panel. Fryers shall have a mercury vapor type 100% safety shut-off with dual combination control gas valve. Fryers shall be wired 120-60-1 phase and shall be furnished with an electrical cord and plug.

Each fryer shall be furnished with one pair chrome plated four mesh baskets, chrome plated grid screen over heat transfer tubes, drain clean out rod and sample of cleaning powder.

Filter station shall be a central filter system by the same manufacturer as the fryers. Filter station shall have a capacity of 160 pounds of oil. Filter shall be a closed system requiring no direct contact with the shortening and shall filter each fryer in 4-1/2 minutes. Filter shall have a 1/3 HP pump with a capacity of 5 gallons per minute. Filter shall have a stainless steel cabinet and door to match the fryers and the top of filter shall have a flat top. Filter shall have a safety switch to provide 100% fryer shut-off when the drain valve is opened. Each fryer shall have a 1-1/4" rear drain opening with front release and a 2" drain line with 6% slope to the filter drawer. Each fryer shall also have a return valve with a closed pipe return system. Return valve shall be located above the drain line and must be opened before the drain valve can be opened. Base of filter shall have a stainless steel filter drawer and crumb basket, a screen, hold down ring and spring loaded "T" arms for the filter paper and filter media. Filter system shall be furnished with one carton of 60 individual packages of filtering compound and one package of 60 paper filters.

Fryers and filter shall be secured together in one battery with a one piece continuous front ledge and connecting strips between each unit. Fryers and filter shall be mounted on the minimum number of casters with polyurethane tired wheels and brakes on the front casters. Specifications are based on Keating Model #24TS fryers and Model #SE24CF filter.

Furnished with the fryers shall be one flexible gas connector assembly in accordance with Detail #A4/QF502. Connector shall have a 1-1/4" x 48" long hydroformed corrugated stainless steel hose with inline braiding and covered with a yellow plastic cover in accordance with ASME standards. The flexible gas connector shall be ANSI Z21.69 design certified. The flexible hose shall be equipped with two swivel connector fittings, a reversed quick disconnect and a 360 degree rotatable hex nut connector fitting. Quick disconnect shall be on the supply end of the hose. The flexible connector shall be furnished with a coiled restraining device with installation hardware. The flexible connector, fittings and the restraining device shall be equipped with the manufacturer's standard equipment and shall be in accordance with the manufacturer's standard specifications. Specifications are based on T&S Model #HG6F48SK.

4.49 #42a Fryers and Filter

Contractor Furnished - Contractor Installed

Fryers with filter shall consist of two fryers joined together in a battery with a central filter system at the right end. Fryers and filter shall be the same as Item #42. Battery shall be furnished with one gas connector assembly in accordance with Detail #A4/QF502, the same as Item #42.

4.50 #43 Fryers

Contractor Furnished - Contractor Installed

Each of these items shall consist of two fryers joined together in a battery which shall be connected to the filter station with food warmer, Item #44. All fryers throughout the project shall be by the same manufacturer. Each battery of two fryers shall measure overall 38-3/4" wide x 32-1/2" front to back x 46-1/2" high. Each fryer shall have a capacity of 68 pounds of oil and shall have the capability of cooking up to 120 pounds of frozen french fries or 150 pounds of chicken per hour. Each fryer shall have a stainless steel fryer vessel, heat transfer tubes, splash deck, splash back and flue deflector installed in a cabinet base. Fry vessel shall have seamless corners and shall be drawn from 18 gauge stainless steel with four 18 gauge stainless steel heat transfer tubes. Fryer vessel and heat transfer tubes shall be polished to a #7 mirror finish. Splash deck shall be constructed of 18 gauge stainless steel and shall slope toward the fry vessel. It shall have 4" high vertical sides to prevent boil-over. Cabinet shall be constructed of 18 gauge stainless steel on sides and rear with 22 gauge stainless steel door.

Each fryer shall be natural gas fired with an input of 134,000 BTU/HR. Each fryer shall include a melt cycle for solid shortening and electric spark ignition. Each fryer shall have indicator lights and two digital solid state timers. Fryers shall have a thermostat with stainless steel bulb, accurate to 3 degrees, from 300 to 350 degrees F. Each fryer shall have a manually resettable high limit control with stainless steel bulb and a safety test switch on the control panel. Fryers shall have a mercury vapor type 100% safety shut-off with dual combination control gas valve. Fryers shall be wired 120-60-1 phase and shall be furnished with an electrical cord and plug.

Each fryer shall be furnished with one pair chrome plated four mesh baskets, chrome plated grid screen over heat transfer tubes, drain clean out rod and sample of cleaning powder. Each fryer shall have oil drain openings, return openings and all other provisions required to allow connection to the filter station, Item #44.

Each set of two fryers shall be secured together in one battery with a one piece continuous front ledge and connecting strip between the units. Fryers shall be mounted on one set of casters with polyurethane tired wheels and brakes on the front casters. The gas connections on the two fryers shall be manifold to one connection point. Specifications are based on Keating Model #18TS fryers.

Furnished with each set of two fryers shall be one flexible gas connector assembly in accordance with Detail #A4/QF502. Connector shall have a 1" x 48" long hydroformed corrugated stainless steel hose with inline braiding and covered with a yellow plastic cover in accordance with ASME standards. The flexible gas connector shall be ANSI Z21.69 design certified. The flexible hose shall be equipped with two swivel connector fittings, a reversed quick disconnect and a 360 degree rotatable hex nut connector fitting. Quick disconnect shall be on the supply end of the hose. The flexible connector shall be furnished with a coiled restraining device with installation hardware. The flexible connector, fittings and the restraining device shall be equipped with the manufacturer's standard equipment and shall be in accordance with the manufacturer's standard specifications. Specifications are based on T&S Model #HG6E48SK.

4.51 #44 Filter Stations

Contractor Furnished - Contractor Installed

Each filter station shall be a central filter system by the same manufacturer as the fryers, Item #43. Each filter station shall be connected to one set of two fryers specified for Item #43. Filter shall be located on the left side or the right side of the fryers as indicated on the plan. Filter stations shall have a capacity of 90 pounds of oil. Each filter station shall measure overall 19-3/8" wide x 36-5/8" front to back x 46-1/2" high. Filter shall be a closed system requiring no direct contact with the shortening and shall filter each fryer in 2-1/2 minutes. Filter shall have a 1/3 HP pump with a capacity of 5 gallons per minute. Filter shall have a stainless steel cabinet and door to match the fryers and the top of filter shall have a flat top. Filter shall have a safety switch to provide 100% fryer shut-off when the drain valve is opened. Each unit shall have a 1-1/4" rear drain opening with front release and a 2" drain line with 6% slope to the filter drawer. Each fryer shall also have a return valve with a closed pipe return system. Return valve shall be located above the drain line and must be opened before the drain valve can be opened. Base of filter shall have a stainless steel filter drawer and crumb basket, a screen, hold down ring and spring loaded "T" arms for the filter paper and filter media. Filter system shall be furnished with one carton of 60 individual packages of filtering compound and one package of 60 paper filters.

Mounted to the backsplash over the filter station shall be a food warmer. Warmer shall have two 250 watt infrared bulbs, heavy duty chrome shades, bulb protectors, ceramic sockets and a 6'-0" long electrical cord and plug. Warmer shall be adjustable in height from 23" to 28".

Filter stations and fryers shall be secured together in one battery with a one piece continuous front ledge and connecting strips between each unit. Fryers and filter shall be mounted on the minimum number of casters with polyurethane tired wheels and brakes on the front casters. Specifications are based on Keating Model #SE18CF filter.

4.52 #45 Pot Filler/Spray Hose Assemblies

Contractor Furnished - Contractor Installed

Pot filler and spray hose assemblies shall each be a wall mounted unit with mixing faucet and two hoses, one equipped with a pot filler and the other equipped with a spray valve. The units shall be mounted to the wall at 48" A.F.F. The wall mounted faucets shall be chrome plated brass with 1/2" inlets on 8" centers. The faucets shall have ceramic cartridges, built-in check valves and lever handles. Faucets shall have a short riser connected to a tee swivel equipped with two in-line continuous pressure type backflow preventers. Each side of the tee shall be connected to an 8'-0" long hose with stainless steel sheath, an insulated handle, and valve. One hose shall be equipped with a self closing spray valve and the other shall be equipped with a automatic shut-off valve and hook nozzle. Units shall also be equipped with two chrome plated wall hooks. The pot filler and spray hose units shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Specifications are based on T&S Model #B-2331-Cerama.

4.53 #46 Bakers Table

Government Furnished - Government Installed

Bakers table shall be the size, shape and arrangement shown on drawing,

measuring overall approximately 60" long x 30" wide x 35-1/2" high to working level. The top shall be constructed of 14 gauge stainless steel with all edges formed down 2" square. The top shall be depressed 3/16" with a 3/4" wide rim on all sides. Top shall be mounted to an open tube base with stainless steel legs and welded stainless steel rails on the rear and each end. Each leg shall have a stainless steel adjustable bullet shaped foot. Specifications are based on Advance Tabco Model #TVSS-306.

4.54 #47 Steamers

Contractor Furnished - Contractor Installed

Steamers shall each be a two compartment pressureless steamer mounted on a cabinet base with a natural gas fired steam generator. Steamers shall measure overall 35-1/2" x 37" x 69" high. Front, sides and top of steamer shall be stainless steel. Steamer base shall be mounted on 6" stainless steel legs with adjustable flanged feet. Steamer cavities and compartment doors shall be 10 gauge type 304 stainless steel. Each cooking compartment shall have a heavy duty one piece, solid compartment door design with replaceable door gasket. Doors shall be hinged on the left. Steam input shall shut-off automatically when the door is opened. Each cooking cavity and shall hold eight 12" x 20" x 2-1/2" deep standard steam table insert pans or four 18" x 26" sheet pans. Each cooking cavity shall have brass steam jets to circulate steam. The interior shall be of coved corner construction with the bottom scored. The interior bottom shall be pitched to a drain in the rear of the compartment. The interior shall have removable stainless steel pan slide racks.

Steamer compartment controls shall be on the right side. Steamer compartment controls and generator controls shall be wired 120-60-1 phase. Each compartment shall have a 60 minute mechanical timer with manual bypass for continuous steaming and a ready light. Steamer shall have a steam standby mode so that unit can start cooking instantly.

Each steamer shall have a high efficiency natural gas heated steam generator to provide atmospheric steam to the cavities. Generator shall have burners rated at 300,000 BTU/HR. Generator shall have nickel guard, electronic spark ignition, automatic water fill on start up and automatic generator drain at shutdown with rinse spray to keep drain line clear. Generator shall have automatic water level control system, low water power cut-off, high limit pressure safety switch, 15 psi safety valve, pressure gauge, gas pressure regulator and control valve.

Furnished with each steamer shall be a water filter provided by the same manufacturer as the steamer. Filters shall be sized to accommodate the flow rate of the steamer. The filters shall consist of a filter cartridge with 1/2 micron precoat filtration with self contained scale inhibitor feed. Filters shall include a wall mounting bracket, filter housing, filter cartridge, scale stick housing, scale stick cartridge, monitoring gauge and shut-off valve. Steamers shall be furnished with a second year of warranty due to purchase with a water filter. Filters shall be mounted to the wall near the steamers in an accessible location.

Steamers and water filters shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Specifications are based on Cleveland Model #36-CGM-16-300 steamers with Model #9797-00 water filters.

4.55 #48 Hand Sinks

Contractor Furnished - Contractor Installed

Hand sinks shall each have one piece deep drawn heavy gauge stainless steel construction with all vertical and horizontal corners coved. Hand sinks shall measure overall 17-1/4" long x 15-1/4" wide with a bowl size of 14" x 10" x 5" deep. Hand sinks shall have an integral 7-3/4" high backsplash with a 2" turn back on a 45 degree angle. The hand sinks shall be furnished with a stainless steel skirt on the front and both sides. Hand sinks shall be installed with the front rim at 34" above the finished floor.

Each hand sink shall be furnished with a stainless steel paper towel dispenser designed to dispense "C" fold paper towels. Paper towel dispenser shall be mounted to the sink backsplash and shall measure 17-1/4" long x 4" wide x 19-5/8" high. Mounted to the front of the towel dispenser at the left end shall be a soap dispenser.

Hand sinks shall have two openings in the backsplash at 4" on center. Mounted to the backsplash shall be a standard faucet with wrist action handles and a swivel goose neck spout with aerator. Each sink shall be equipped with a 1-1/2" stainless steel basket drain, a lever operated drain with built-in overflow with plastic overflow tube and spring clips. Specifications are based on Advance Tabco Model #7-PS-85 sinks.

4.56 #49 Ingredient Bins, Mobile

Government Furnished - Government Installed

Each ingredient bin shall be a mobile stainless steel unit with 75 pound capacity. Each bin shall be approximately 14-1/4" wide x 19-1/4" deep x 27-1/4" high. Bins shall be constructed with 18 gauge stainless steel bottoms, 20 gauge stainless steel sides, coved corners, welded seams and a 16 gauge stainless steel slide off cover. Bins shall have a perimeter rubber bumper and four 4" diameter ball bearing swivel casters. Specifications are based on Piper Model #47-75.

4.57 #50 Utensil Washer

Contractor Furnished - Contractor Installed

Utensil washer shall be a pass through single rack machine with an NSF rated capacity of 25 racks of pans per hour. Utensil washer shall measure overall 34" wide x 36" deep x 77" high. The utensil washer shall have a 24 gallon wash tank. The base, frame, tank, hood, spray arms, doors and enclosure panels shall be constructed of stainless steel with a #3 finish. Housing shall have a 28-7/8" wide x 28" high opening at each end with a slide up counter balanced door for pass through operation. Spray system shall consist of rotating wash and rinse spray assemblies above and below the utensil rack with molded "water knife" nozzles. The front of the utensil washer shall be equipped with a slide up door. Top of utensil washer shall have a 6" diameter exhaust duct collar.

Utensil washer shall be wired 480-60-3 phase and shall have a 7.5 HP drip proof wash pump motor mounted on a stainless steel frame. Motor shall be wired through a magnetic contactor and shall have thermal overload and fuse protection. Pump shall deliver 280 GPM. The upper and lower spray arms shall be interchangeable and have removable end caps. Tank shall be heated by a thermostatically controlled 22.0 A. electric heating element. The utensil washer shall be equipped with a built-in 27.0 K.W. electric booster heater with separate connection to provide 3.3 gallons of 180 degrees F. final rinse water per rack. The booster heater shall be completely

inter-plumbed and the controls shall be inter-wired.

The controls shall be mounted in the front of the utensil washer and shall consist of a power-on switch with indicating pilot light. This switch shall automatically fill the tank to the proper level and turn on the tank heater and the booster. The start button with in-cycle indicating light shall start the wash and rinse cycles. The adjustable timer shall be capable of adjusting the wash time from 2 to 5 minutes. Door safety switches shall be provided to prevent operation without the doors closed.

Utensil washer shall be furnished with 2 pan racks for 12" x 20" steam table pans, 2 bake sheet racks for 18" x 26" sheet pans, 1 utility rack and 1 open flat rack. All racks shall be 28" x 28" x 5" high. The utensil washer shall be equipped with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Specifications are based on a Champion Model #PP-28 with built-in electric booster heater.

4.58 #51 Pot and Pan Sink
Contractor Furnished - Contractor Installed

Pot and pan sink shall be the size, "L" shape and arrangement shown on drawing, measuring overall approximately 22'-0" long x 3'-6" front to back on the left leg and 7'-0" long x 2'-10" front to back on the right leg x 2'-10" high to working level. Pot and pan sink shall be constructed of 14 gauge type 304 stainless steel throughout. All free edges of top shall be terminated in a 3" high x 1-1/2" wide square channel rim. The edges of top abutting the wall shall be formed up into a 12" high x 2" thick backsplash. One end of top shall be mitered out on the front edge to align with the entrance of the utensil washer, Item #50. The end of the backsplash shall be mitered into the utensil washer as shown on plan. The end of the top shall be formed down into the utensil washer and shall be secured and sealed in a watertight manner.

Integrally welded into the top in the location shown on plan shall be a disposer bowl specified under Item #15. Disposer control panel shall be mounted to the underside of the top as specified under Item #15. Mounted to the backsplash and centered above the disposer bowl shall be a pre-rinse spray specified under Item #52.

Next to the disposer shall be a recirculating wash sink section, 60" wide x 28-3/4" front to back x 19" deep. Wash sink shall have a full length self-draining wash manifold with water jets 6" on center on the rear which shall be flush with the face of the sink. Wash sink shall have a full length water intake on the rear with a perforated cover. Sink shall have a heavy duty stainless steel centrifugal pump and 2 HP continuous duty motor beside the sink below the flat drain board. Pump shall deliver 35 to 40 gallons per minute through each wash jet. Control panel shall also be located below the drain board. Control panel shall have flat touch panel and 24 volt operator controls. Wash sink shall have a 7.0 K.W. heater with a temperature sensor to activate heat when required to maintain optimal temperature. Wash sink shall also have a high level sensor to make sure sink has enough water to operate properly and a low level sensor to make sure that the sink is fully drained when empty. Control panel shall include a timed wash cycle. Furnished with the wash sink shall be a stainless steel utensil basket to hang on either side of the wash compartment. The motor, heater and controls shall all be wired 480-60-3 phase.

Beside the wash sink shall be a rinse sink and then a sanitizing sink. Each

sink shall be 30" wide x 28-3/4" front to back x 14" deep. All three sinks shall be fitted with 1-1/2" rear exit rotary ball valves with twist handles. Drain fittings shall be cast bronze with stainless steel on surfaces that contact the water. Each drain shall have a stainless steel strainer with tamper proof screw. A 14 gauge stainless steel tab shall be stud bolted to the bottom of each sink to support the drain handle. The bottom of the sanitizing compartment shall have two openings in the bottom as shown on plan to accommodate a sink heater specified under Item #54. Sanitizing compartment shall be furnished with a stainless steel wire basket the full size of the compartment.

Mounted to the back splash and centered over the sink partitions shall be two faucets with an exposed body and concealed supply connections at the back of the sink. Supply connections shall have 90 degree street ell inlets to fit within the depth of the backsplash. Each faucet shall have 3/4" NPT hot and cold inlets on 8" centers. Faucets shall have 12" swing spouts without aerators. All faucets shall be by the same manufacturer throughout the project. Specification is based on T&S Model #B-0290 faucets.

Mounted to the back splash above the sanitizing compartment shall be a single faucet with 3-7/8" fixed spout. Faucet inlet shall be connected from the outlet of the booster heater, Item #51a. Faucet shall have a heat resistant handle to withstand 180 degrees F. water temperature. Specifications are based on a T&S Brass & Bronze Works Model #B-0700 faucet with Model #001147-45 handle with red index button. Mounted to the back splash shall be a plaque for 180 degrees F. hot water that reads, "DANGER, EXTREME HOT WATER".

Entire top shall be mounted to a stainless steel open tube base with no rail bracing on the working side. Base below the entire pot and pan sink shall be open to the floor. Legs not connected to rails in two directions shall have stainless steel flanged feet secured and sealed to the floor. Specifications for the pot and pan sink are based on a Power Soak customized institutional line system with a Model #PS-200 control panel.

4.59 #51a Booster Heater

Contractor Furnished - Contractor Installed

Booster heater shall be an electric booster water heater measuring 23" wide x 23-1/2" deep x 31-1/2" high including legs. Booster heater shall have a 16 gallon tank, fiberglass insulation and stainless steel front panel, body and base. Booster heater shall be mounted on stainless steel legs, adjustable in height from 6" to 8".

Booster heater shall have 15.0 kilowatt elements wired 480-60-3 phase and shall have the capacity to heat 151 gallons per hour of water from 140 degrees F. to 180 degrees F. Heating elements shall be metal sheathed, controlled by close tolerance immersion thermostats. Booster heater shall be protected with a high temperature limit switch and low water cut-off. Booster heater shall also be furnished with temperature/pressure relief valve, pressure reducing valve, two temperature/pressure gauges, shock absorber, pilot light and on-off switch. Booster heater shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Specifications are based on Hatco Model #S-15.

4.60 #52 Pre-Rinse Sprays

Contractor Furnished - Contractor Installed

Pre-rinse sprays shall be mounted to the back splash above the disposer bowl on Items #14 and #51. Each shall be a backsplash mounted pre-rinse faucet complete with wall bracket. Faucet shall have 1/2" NPT female inlets spaced 8" on center. Faucet shall have internal check valves and ceramic cartridges. Faucet shall have a 3/8" NPT female outlet with an 18" long vertical riser. Connected to the riser shall be a hose with a stainless steel sheath, an in-line continuous pressure type back flow preventer, an insulated handle, and a spray valve. Pre-rinse unit shall have a coil spring and a hook to hold the spray valve in position. Faucets shall be in accordance with the manufacturer's standard specifications. Specifications are based on a T&S Brass & Bronze Works Model #B-2278-Cerama with wall bracket.

4.61 #53 Exhaust Hood

Contractor Furnished - Contractor Installed

Condensate hood shall be a factory built wall mounted canopy style condensate ventilator. Hood shall be an exhaust only, Type II unit designed specifically for removal of moisture laden air in non-grease applications. Condensate hood shall measure approximately 4'-0" wide x 3'-6" front to back x 2'-0" high. Hood shall be in accordance with Detail #A4/QF501. Hood shall be installed with the bottom edge at 6'-8" above the floor. Condensate hood shall be constructed in accordance with the latest requirements of NFPA Bulletin #96 and shall be fabricated according to the National Sanitation Foundation Standard #2 and shall bear the NSF seal. The condensate hood shall be constructed of 18 gauge type 304 stainless steel with a #4 finish. All exposed welds shall be ground smooth and polished to the original finish of the metal. Internal seams shall be filled with NSF approved non-hardening sealer. Interior of hood shall include full length removable condensate baffles on the front and rear, constructed of 18 gauge type 304 stainless steel. Baffles shall be pitched to drain into a full perimeter welded condensate collecting gutter with a 1/2" stainless steel drain fitting at the rear corner closest to the floor sink. Drain line shall be extended from the hood to the floor sink below. Exhaust hood shall be sized to provide proper exhaust in accordance with the manufacturers' recommendation.

Hood shall be furnished with necessary hanger rods and brackets to secure this condensate hood to the building structure above and the wall behind the hood. Hood shall be supplied with stainless steel closure channels as required to close the gap between the top of the exhaust hood and the finished ceiling. All exhaust hoods throughout the project shall be by the same manufacturer. Specifications are based on an Caddy Model #CH-W-B wall mount condensate hood.

4.62 #54 Sink Heater

Contractor Furnished - Contractor Installed

Heater shall be an electric sink heater measuring 9-1/8" wide x 17-1/8" deep x 12-3/4" high. Sink heater shall have a tubular water chamber with heating elements wrapped outside the flow tube so elements do not come in direct contact with the water. Water shall circulate by natural convection. Sink heater shall have a 2" diameter inlet and outlet on the top, a front reservoir drain, two clean out caps, drain valve, fiberglass insulation and a stainless steel front panel, body and base. Sink heater shall be mounted to the underside of the sanitizing sink compartment in accordance with the

manufacturer's recommendations. Sink heater shall have a 9.0 K.W. element wired 208-60-3 phase and the load shall be balanced on all three phases. Heating element shall be metal sheathed and controlled by an electronic controller. The sink heater shall be protected with a high temperature limit switch and low water cut-off. Sink heater shall have an on-off switch, pilot light, and digital temperature display. Sink heater shall be furnished with all standard equipment and shall be in accordance with the manufacturer's standard specifications. Specifications are based on a Hatco Model #3CS2-9B.

4.63 #55 Exhaust Hood

Contractor Furnished - Contractor Installed

Condensate hood shall be the same as Item #53 except it shall measure approximately 5'-0" wide x 4'-6" front to back x 2'-0" high. Hood shall be in accordance with Detail #A3/QF501. Hood shall be installed with the bottom edge at approximately 8'-0" above the floor to avoid interference with the doors of the utensil washer.

4.64 #56 Pot & Pan Racks

Government Furnished - Government Installed

Pot and pan racks shall be by the same manufacturer as all other shelving on the project. Shelves shall be constructed of 18 gauge type 302 or 304 solid stainless steel with two fold thickness and 1/8" high raised rim on all four edges. Each shelf shall be solid with embossed ribs for strength. Each corner shall have an aluminum casting with a tapered collar shaped and sized to fit the post and inner tapered split sleeve. Vertical support posts shall be stainless steel and shall be 1" diameter with rolled circular grooves 1" apart along their length. Shelf shall be mounted to post by means of a 2 piece plastic split sleeve snapped around the post at the desired shelf height, with the resultant tapered surface contacting the matching tapered collar in the shelf corner.

Pot and pan racks shall be 48" long x 24" wide x 68" high. Each rack shall have four shelves. Each rack shall have four 5" diameter swivel stem caster with polyurethane tire and donut bumper. Two casters shall have a brake. Specifications are based on InterMetro Model #PR48ES.

4.65 #56a Mixer Accessory Racks

Government Furnished - Government Installed

Mixer accessory rack shall measure overall 27" x 51" x 72" high. Rack shall have two 24" x 48" shelves constructed of 14 gauge stainless steel with all edges formed down 1-5/16" and back on a 30 degree angle. Each corner shall have an ABS black bracket with a sleeve and set screw to accommodate the uprights. The uprights shall be 1-1/4" O.D. 16 gauge stainless steel tubing. Front uprights shall terminate at the upper shelf and rear uprights shall extend above the upper shelf to accommodate an overhead attachment rack. Attachment rack shall have two 1-5/8" O.D. stainless steel posts which shall fit over the rear uprights and three 1" O.D. stainless steel cross members welded to the posts. Two upper cross members shall have seven 3/4" O.D. x 6" long pegs and the lower cross member shall have seven 1/4" O.D. x 3" long pegs. Rack shall be mounted on 5" diameter all swivel casters with revolving bumpers. Specifications are based on Piper/Servolift Model #1005-A.

4.66 #57 Head Count Stations

Contractor Furnished - Contractor Installed

Head count stations shall be millwork items and shall be covered in other sections of the specifications.

4.67 #58 Salad Bar Counters

Contractor Furnished - Contractor Installed

Each salad bar counter shall be a modular serving counter by the same manufacturer as the other modular counters in the serving area. The appearance of all of the counters shall match. Twelve counters shall be five pan units measuring 77-1/2" long and eight counters shall be two pan units measuring 36-1/4" long. Each counter shall be 30-1/2" wide x 35" high to working level. The top shall be constructed of 16 gauge stainless steel. Both ends of each top shall be without interlocking devices. A stub wall with stainless steel tray slide (Item #77a) shall be located in front of each salad bar counter. Dropped into the counter top shall be a 9" deep self contained insulated refrigerated pan with side refrigeration coils. The refrigerated pan shall be equipped with food pan supports recessed 3" below the top. The refrigerated pan shall have a stainless steel interior liner with coved corners and a 3/4" drain with strainer and drain valve. Drain line shall be extended to a floor drain below under the plumbing sections of the contract documents. The insulation around the refrigerated pan shall be covered with a 22 gauge galvanized outer shell. The 1/2 H.P. compressor shall be mounted in a galvanized compressor housing mounted to the bottom of the insulated pan and shall be wired 120-60-1 phase. The counter top shall be mounted on a counter body with a 1-1/4" x 1-1/4" square stainless steel tubing frame of all welded construction. The front and both ends of the counter shall be enclosed with stainless steel panels. The rear of the counter base shall be equipped with sliding stainless steel doors. The interior of the base, other than below the compressor, shall be equipped with a bottom stainless steel undershelf. The counter shall be mounted on 5" diameter non-marking rubber tired swivel type ball bearing casters. The two casters on the rear side of the counter shall be equipped with toe-activated brakes. Mounted to the counter top and extending the full length shall be a 20" high single service buffet style overshelf with full length fluorescent lighting. The overshelf shall be constructed of 16 gauge stainless steel with clear plexiglas sneeze guards on the customer side. The overshelf shall be mounted to the top with 1" square stainless steel standards. The fluorescent light fixture and the compressor shall be inter-wired for one cord and plug connection. Each salad bar counter shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. The equipment contractor shall furnish a one year refrigeration service policy on a local level. Specifications are based on Atlas Model #CWRM-5 and #CWRM-2 with 5 sliding doors, #OSC single buffet overshelf with fluorescent lights and a #US undershelf.

4.68 #59 Soup Stations

Contractor Furnished - Contractor Installed

Each soup station shall be a modular serving counter by the same manufacturer as the other modular counters in the serving area. The appearance of all of the counters shall match. The counter top shall measure overall 36-1/4" long x 30-1/2" wide x 35" high to working level. The top shall be constructed of 16 gauge stainless steel. Both ends of each top shall be without interlocking devices. A stub wall with stainless steel tray slide (Item #77a) shall be located in front of each soup station.

Mounted in the top in location shown on drawing shall be two drop-in soup wells. Each soup well shall have a 12" diameter stainless steel flange with a stainless steel liner to accommodate an 11 quart insert. Each soup well shall have a drain opening with a drain valve. Each soup well shall be wired 120-60-1 phase with an 825 watt heating element and a cord and plug. Each soup well shall have a die stamped remote control panel with knob, infinite control and red signal light. Control panels shall be mounted in the apron on the operator side of the counter. The counter top shall be mounted on a counter body with a 1-1/4" x 1-1/4" square stainless steel tubing frame of all welded construction. The front and both ends of the counter shall be enclosed with stainless steel panels. The rear of the counter base shall be equipped with sliding stainless steel doors. The interior of the base shall be equipped with a bottom stainless steel undershelf. The counter shall be mounted on 5" diameter non-marking rubber tired swivel type ball bearing casters. The two casters on the operator side of the counter shall be equipped with toe-activated brakes. Mounted to the counter top and extending the full length shall be a 20" high single service buffet style overshelf with full length fluorescent lighting. The overshelf shall be constructed of 16 gauge stainless steel with clear plexiglas sneeze guards on the customer side. The overshelf shall be mounted to the top with 1" square stainless steel standards. Each soup station shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Specifications are based on Atlas Model #CWFT-2 utility unit with two #SWD soup wells, #RPS-2 sliding doors, #OSC-2 single buffet overshelf with fluorescent lights and a #US2 undershelf.

4.69 #60 Bread Dispensers

Government Furnished - Government Installed

Bread dispensers shall be a curved acrylic counter top non-refrigerated self-service cabinet. Cabinet shall be 29" wide x 25" deep x 25" high and shall accommodate three 18" x 26" acrylic sheet pans which shall be furnished with the unit. Cabinet shall have acrylic construction on front, rear, sides, bottom and top. Base of the unit shall have rubber feet. Cabinet shall have three hinged lift-up doors on the front and two hinged doors on the rear. Interior of cabinet shall have slides to hold the sheet pans and shelf lights wired 120-60-1 phase with cord and plug. Specifications are based on Federal Model #CLCT-2.

4.70 #61 Butter Dispensers

Government Furnished - Government Installed

Each butter dispenser shall be a stainless steel unit measuring 12" wide x 9-1/8" deep x 13-1/4" high. Unit shall hold up to 315 butter pats on seven angled trays on the front with a plexiglass cover. Unit shall have two stainless steel sealed eutectic cooling units to keep the butter cool. Specifications based on Serv-A-Slice Model #B5.

4.71 #62 Plate Dispensers

Government Furnished - Government Installed

Each plate dispenser shall be a mobile unheated dispenser with cabinet style base. Each unit shall be 30" x 20" x 40" high overall. The frame shall be constructed of all welded steel with gray baked enamel finish. The top shall be 18 gauge stainless steel. The base of the dispensers shall be constructed of 20 gauge stainless steel. Each dispenser shall have two drop-in adjustable dish dispensing cylinders. Dish dispensers shall be constructed of stainless steel with top flange with die formed outer rim

and three plastic dish guides. Dispensing mechanisms shall consist of a complement of springs that attach to the top flange and to a stainless steel wire frame fitted with a stainless steel dish platform. The dispensers shall be adjusted by engaging or disengaging individual springs. Each cylinder shall be sized and calibrated to fit the dishes furnished by the Owner. Each dispenser shall be mounted on four 4" diameter heavy duty double ball bearing swivel casters with polyurethane tires. Each dispenser shall also be fitted with a one piece wrap around non-marking vinyl bumper. All dish, tray and rack dispensers throughout the project shall be by the same manufacturer. Specifications are based on Piper/Servolift Model #2AT3-ST dispensers.

4.72 #63 Cold Pans

Contractor Furnished - Contractor Installed

Self contained drop-in refrigerated cold pans shall measure overall 45-3/4" long x 26-1/4" front to back x 24" high. Cold pans shall be by the same manufacturer as the other drop-in refrigerated pans and hot food warmers throughout the project. Each cold pan shall have an 18 gauge type 304 stainless steel flange with a raised beaded rim around the perimeter with a solid vinyl gasket to form a tight seal. Each cold pan shall have a 9" deep well constructed of 18 gauge stainless steel with coved corners. The interior of each pan shall have perimeter food pan supports recessed 3" below the top flange. Each cold pan shall accommodate three 12" x 20" standard steam table insert pans and shall be furnished with removable separator bars. Each pan shall have copper refrigeration tubing wrapped around the side walls and firmly soldered in place. Each pan shall have high density polystyrene insulation, 1" thick on the sides and 2" thick on the bottom. Each refrigerated pan shall have a 22 gauge galvanized steel outer liner. The left end of each refrigerated pan shall have a 3/4" diameter stainless steel drain connection. A 3/4" copper drain line shall be extended from the drain connection to the floor drain under Section 15. The refrigerated pans shall be self contained with a 1/4 HP compressor wired 120-60-1 phase with a cord and a NEMA #5-15P plug. The refrigerant shall be CFC free. The compressor shall be mounted in a housing secured to the underside of the pan. The refrigerated pans shall be mounted in the counter top and sealed. Each cold pan shall be equipped with an on-off switch with pilot light and a digital electronic thermostat/thermometer. Refrigerated pans shall comply with NSF Standard No. 7. The refrigerated pans shall be equipped with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. The refrigerated pans shall be furnished with a one year refrigeration service policy on a local level. Specifications are based on Atlas Model #RM-3.

4.73 #63a Shelf Protectors, Lighted

Contractor Furnished - Contractor Installed

Shelf protector shall each be a single sided buffet style overshef with fluorescent lights. Sneeze guard shall be 49-1/2" long x 26-3/8" front to back x 20" high. Sneeze guard shall have a clearance of 14" above the counter and shall be mounted on 1" square stainless steel posts. Posts shall be secured to the counter top with concealed mounting bolts on the underside. Posts shall be sealed to the top. Unit shall have a 14-3/4" wide full length stainless steel top shelf with integrally welded end caps. Sneeze guard shall have 3/16" thick clear plexiglas sneeze guards with stainless steel channel edging. The underside of the top shelf shall have fluorescent lights extending the full length. Lights shall be complete with fluorescent tubes with clear plastic safety shields with end caps. Lights shall be wired 120-60-1 phase and shall have an on-off switch. Sneeze guard

shall be by the same manufacturer as the drop-in refrigerated pans and hot food warmers throughout the project. Specifications are based on Atlas Model #OSC-3 single service buffet style overshef.

4.74 #64 Fitness Bar Counters
Contractor Furnished - Contractor Installed

Fitness bar counters shall be custom fabricated in the size, shape and arrangement as shown on plan. Each counter shall measure overall approximately 7'-6" long x 2'-6" front to back x 2'-10" high. The top shall be constructed of 14 gauge stainless steel with a 1-1/2" square turn down edge on all sides. The front edge of counters shall butt tightly against the building wall and the tray slide, Item #64a. Joint shall be neatly sealed the full length of the counter. Opening shall be provided in the top for a cold pan specified under Item #63. Mounted to the top shall be a sneeze guard specified under Item #63a.

Base of each counter shall be constructed of 18 gauge stainless steel and shall be enclosed on all sides except the working side. The working side of the counters shall have a full length 10" deep apron just below the top. Recessed in the apron shall be a light switch for the sneeze guard, Item #63a and an on-off switch for the cold pan, Item #63. The interior of the base shall have a full length 16 gauge stainless steel undershef measuring 24" front to back. Rear and sides of undershef shall be formed up 1-1/2" square and the sides shall be tack welded and sealed to the body. The rear corners of undershef shall be integrally welded. Counters shall be mounted on 6" high, 1-5/8" diameter stainless steel legs with adjustable stainless steel feet. Fitness bar counters shall otherwise be constructed in accordance with Section 2 of the specifications.

4.75 #64a Tray Slides
Contractor Furnished - Contractor Installed

Tray slides shall be custom fabricated in the size, shape and arrangement as shown on plan. Tray slides shall accommodate 14" x 18" trays. Tray slides shall measure approximately 27'-6" long x 14" wide. The tray slides shall be constructed of 14 gauge stainless steel. Front edge of tray slide shall have a 1/2" high inverted V rim with a 2" deep turn down edge on the customer side. Tray slide shall have two 1/2" high inverted V ribs extending the full length. The rear edge of the tray slides shall be formed down and anchored to the rear side of the blocking. The rear edge of the tray slides shall fit tight against the front edge of the counters (Items #64 and #67) and shall be neatly sealed the full length. The distance wall to wall shall be field verified and the ends of the tray slides shall fit tight against the building walls and shall be sealed. The tray slides shall be mounted to the partial height wall with 4" high 14 gauge stainless steel brackets spaced 3'-0" on center. Brackets shall be secured to the tray slide and counter base. Tray slides shall be constructed in accordance with Part 2 of the specifications.

Each tray slide shall include a 6" wide 14 gauge stainless steel filler channel in front of the griddle, Item #69. Front and rear edge of channel shall be formed down 1-1/2" square to match the edges of the adjacent serving counters. Front edge of channel shall be tight against the rear edge of the tray slide and shall be sealed together. Exposed ends shall be welded closed. The filler channels shall be supported from the wall with stainless steel solid brackets and shall be reinforced on the underside as required to support the sneeze guard, Item #70a and prevent any lateral movement.

The rear side of the partial height wall below the tray slides, between Item #64 and the end wall and between Item #64 and Item #67, shall be covered with 18 gauge stainless steel panels. Panels shall lap under the rear turn down edge of the tray slide and shall extend down to the top of the quarry tile base. Panels shall be secured with mastic in a concealed manner. Tray slides shall otherwise be constructed in accordance with Section 2 of the specifications.

4.76 #65 Not Used

4.77 #66 Hot Food Warmers, 6 Wells
Contractor Furnished - Contractor Installed

Drop-in hot food warmers shall each measure overall 84-3/4" long x 24" wide x 13" high. Hot food warmers shall be by the same manufacturer as the other drop-in hot food units and refrigerated pans throughout the project. Each hot food warmer shall have six individually heated wells, each measuring 12" x 20" x 6" deep. Each hot food warmer shall accommodate six 12" x 20" x 6" mm deep standard steam table insert pans. The top flange shall be 18 gauge stainless steel with a raised beaded edge around the entire perimeter and a solid vinyl gasket to form a tight seal. The wells shall have an inner liner of 18 gauge stainless steel with one piece all welded construction. All corners shall be coved on a minimum of 1/4" radius. Hot food warmers shall have 1" thick high density fiberglass insulation on all sides and 2" thick insulation on the bottom. The outer liner shall be constructed of 22 gauge galvanized steel. Hot food warmers shall have a drain opening in each well with a drain manifold. Drain line shall be extended forward close to the working side of the counter with a single drain valve on the end closest to the floor drain.

Hot food warmer shall be wired 208-60-1 phase and shall have a cord and NEMA #L6-50P plug. Each well shall have an 850 watt heating element and an individual thermostat control. Hot food warmer shall be provided with standard controls mounted below the wells in a stainless steel control panel. Hot food warmer shall be mounted into the counter top in accordance with the manufacturer's recommendations and sealed. Specifications are based on Atlas Model #WIH-6-DM-RE.

4.78 #66a Shelf Protectors, Sneeze Guard
Contractor Furnished - Contractor Installed

Each counter protector shall be 90-3/4" long x 15-1/2" wide x 14" high. Counter protector shelf shall be mounted on 1" square stainless steel posts with the front posts angled back 3-1/2" at the top. Posts shall be secured to the counter top with concealed mounting bolts on the underside. Posts shall be sealed to the top. Unit shall have a 12" wide full length stainless steel top shelf with all edges formed down square. Front of counter protector shall have a glass sneeze guard with stainless steel channel edging. The underside of the top shelf shall have fluorescent lights extending the full length. Lights shall be complete with fluorescent tubes with clear plastic safety shields with end caps. Lights shall be wired 120-60-1 phase and shall have an on-off switch. Counter protector shall be by the same manufacturer as the drop-in refrigerated pans and hot food warmers throughout the project. Specifications are based on Atlas Model #PRCL-6 protector case with lights.

4.79 #67 Hot/Grill Counters

Contractor Furnished - Contractor Installed

Hot/grill counters shall be custom fabricated in the size, shape and arrangement as shown on plan. Each counter shall measure overall approximately 8'-0" long x 3'-0" wide x 2'-10" high. The top shall be constructed of 14 gauge stainless steel with a 4" high x 1" wide backsplash against the building wall and a 1-1/2" square turn down edge on all other sides. The front edge of counters shall butt tightly against the building wall and the tray slides, Items #64a and #67a. Joint shall be neatly sealed the full length of the counter. Openings shall be provided in the top for hot food wells specified under Item #66 in the locations shown on plan. Mounted to the top shall be a sneeze guard specified under Item #66a.

Mounted into the top at one end of the hot food warmer, toward the customer side as shown on plan, shall be a hot water fill faucet with ceramic cartridge, single control valve and a 6" horizontal swing spout. Faucet shall be located so the swing spout can reach the hot food warmer without interfering with the counter protector posts. Handle shall face the operator side. The faucet shall be connected to hot water and shall have a red hot water indicator on the handle. Specifications are based on a T&S Model #B-0208-Cerama faucet.

Base of each counter shall be constructed of 18 gauge stainless steel and shall be enclosed on all sides except the working side. The working side of the counters shall have a full length 9" deep apron just below the top. Recessed in the apron shall be a light switch for the sneeze guard, Item #66a. The interior of the base shall have a full length 16 gauge stainless steel undershelf measuring 24" front to back. Rear and sides of undershelf shall be formed up 1-1/2" square and sides shall be tack welded and sealed to the body. The rear corners of the undershelf shall be welded closed. Counters shall be mounted on 6" high, 1-5/8" diameter stainless steel legs with adjustable stainless steel feet. Hot/grill counters shall otherwise be constructed in accordance with Section 2 of the specifications.

4.80 #67a Tray Slides

Contractor Furnished - Contractor Installed

Tray slides shall be custom fabricated in the size, shape and arrangement as shown on plan. Tray slides shall accommodate 14" x 18" trays. Tray slides shall measure approximately 24'-3" long x 14" wide. The tray slides shall be constructed of 14 gauge stainless steel. Front edge of tray slide shall have a 1/2" high inverted V rim with a 2" deep turn down edge on the customer side. Tray slide shall have two 1/2" high inverted V ribs extending the full length. The rear edge of the tray slides shall be formed down and anchored to the rear side of the blocking. The rear edge of the tray slides shall fit tight against the front edge of the hot/grill counters (Item #67) and shall be neatly sealed the full length. The distance wall to wall shall be field verified and the ends of the tray slides shall fit tight against the building walls and shall be sealed. The tray slides shall be mounted to the partial height wall with 4" high 14 gauge stainless steel brackets spaced 3'-0" on center. Brackets shall be secured to the tray slide and counter base.

Each tray slide shall include a 6" wide 14 gauge stainless steel filler channel in front of the griddle, Item #69. Front and rear edge of channel shall be formed down 1-1/2" square to match the edges of the adjacent serving counters. Front edge of channel shall be tight against the rear edge of the tray slide and shall be sealed together. Exposed ends shall be

welded closed. The filler channels shall be supported from the wall with stainless steel solid brackets and shall be reinforced on the underside as required to support the sneeze guard, Item #70a and prevent any lateral movement.

The rear side of the partial height wall below the tray slides, between Item #67 and the end wall shall be covered with 18 gauge stainless steel panels. Panels shall lap under the rear turn down edge of the tray slide and shall extend down to the top of the quarry tile base. Panels shall be secured with mastic in a concealed manner. Tray slides shall otherwise be constructed in accordance with Section 2 of the specifications.

4.81 #68 Dinner Plate Dispensers

Government Furnished - Government Installed

Each plate dispenser shall be a mobile unheated dispenser with cabinet style base. Each unit shall be 30" x 20" x 40" high overall. The frame shall be constructed of all welded steel with gray baked enamel finish. The top shall be 18 gauge stainless steel. The base of the dispensers shall be constructed of 20 gauge stainless steel. Each dispenser shall have two drop-in adjustable dish dispensing cylinders. Dish dispensers shall be constructed of stainless steel with top flange with die formed outer rim and three plastic dish guides. Dispensing mechanisms shall consist of a complement of springs that attach to the top flange and to a stainless steel wire frame fitted with a stainless steel dish platform. The dispensers shall be adjusted by engaging or disengaging individual springs. Each cylinder shall be sized and calibrated to fit the dishes furnished by the Owner. Each dispenser shall be mounted on four 4" diameter heavy duty double ball bearing swivel casters with polyurethane tires. Each dispenser shall also be fitted with a one piece wrap around non-marking vinyl bumper. All dish, tray and rack dispensers throughout the project shall be by the same manufacturer. Specifications are based on Piper/Servolift Model #2AT6-ST dispensers.

4.82 #69 Griddles

Contractor Furnished - Contractor Installed

Griddles shall each be a natural gas fired unit with stainless steel front, sides and rear. Each griddle shall measure overall 48-1/2" wide x 30-5/8" front to back x 12" high to working level. The griddle plates shall be 3/4" thick high carbon steel plate with a trivalent chromium surface applied, having an emissivity rating of .078. Each griddle plate shall measure 45" x 24". Each griddle shall have a 2" wide front drain trough and a 3" wide trough on the left side. The trough shall have a 4" x 1-1/2" drain opening in the left gutter draining into a stainless steel grease drawer. The grease drawer shall have baffles and a rear handle. Each griddle shall have a 14 gauge stainless steel back splash that is 4-1/2" high at the rear and tapering down to 1/2" high at the front edges. Each griddle shall have "H" shaped cast iron atmospheric burners spaced every 12". Each burner shall have a manual piezo igniter. Burners shall have a total gas input of 120,000 BTU/HR. Griddles shall have 100% safety shut-off and gas pressure regulators. Each griddle shall be equipped with two thermostats. Each thermostat shall be a close range, hydraulic type, accurate to plus or minus 5 degrees from 250 degrees to 400 degrees Fahrenheit. Each griddle shall be equipped with a razor scraper, a 4" wide spatula, a long handle palmetto brush, an egg turner and a can of cleanser. Each griddle shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. Each griddle shall be mounted on a portable stand specified under Item #70. Specifications are

based on Keating Model #48x30 Miraclean 2000 gas griddles.

Furnished with each griddle shall be a flexible gas connector assembly in accordance with Detail #A4/QF502. Connector shall have a 3/4" x 48" long hydroformed corrugated stainless steel hose with inline braiding and covered with a yellow plastic cover in accordance with ASME standards. The flexible gas connector shall be ANSI Z21.69 design certified. The flexible hose shall be equipped with two swivel connector fittings, a reversed quick disconnect and a 360 degree rotatable hex nut connector fitting. Quick disconnect shall be on the supply end of the hose. The flexible connector shall be furnished with a coiled restraining device with installation hardware. The flexible connector, fittings and the restraining device shall be equipped with the manufacturer's standard equipment and shall be in accordance with the manufacturer's standard specifications. Specifications are based on T&S Model #HG-6D-48SK.

4.83 #70 Griddle Stands

Contractor Furnished - Contractor Installed

Griddle stands shall be by the same manufacturer as the griddles, Item #69. Each stand shall measure 48" x 30" x 24" high. Stands shall have stainless steel legs, reinforced stainless steel undershelf and polyurethane casters with brakes. Top of each stand shall have stainless steel channels which shall be bolted to the underside of the griddles. Specifications are based on Keating griddle stands.

4.84 #70a Splash Guards

Contractor Furnished - Contractor Installed

Splash guards shall each be custom fabricated in the size, shape and arrangement as shown on plan. Splash guards shall measure overall approximately 4'-7" long x 1-1/2" thick x 20" high. The splash guards shall extend in front of the griddles and stands, Items #69 and 70. Each splash guard shall be supported by three 1-1/2" square 16 gauge stainless steel posts with the top of the posts welded closed. The posts shall be welded integrally to the top of the filler channel on the rear edge of the tray slide. The splash guards shall have 1/4" thick tempered glass panels located between the posts and extending from 2" above the tray slide to the top of the posts. Each tempered glass panel shall be edged on all sides with stainless steel channels with corners neatly mitered. The tempered glass panels shall be mounted on channels secured to the inside faces of the posts so the panels can be raised for replacement. Splash guards shall otherwise be constructed in accordance with Section 2 of the specifications.

4.85 #71 Exhaust Hoods, Island Type

Contractor Furnished - Contractor Installed

Each exhaust hood shall be an island style hood, measuring overall approximately 6'-0" long x 5'-6" front to back x 2'-0" high. Hoods shall be in accordance with Detail #A1/QF502. Each hood shall have a smooth stainless steel finished panel on the rear side facing the customers. Exhaust hoods shall be installed with the bottom edge at 6'-8" above the floor. Exhaust hoods shall be the same as specified for Item #39 including the same ultra violet light technology, materials, construction, cartridges, code approvals, hanger rods, closure panels, make-up air plenum, control panel and lights. All exhaust hoods throughout the project shall be by the same manufacturer. Specifications are based on Caddy Model #SH-BCU-I-PA-I exhaust hood.

4.86 #71a Exhaust Hoods, Wall Type

Contractor Furnished - Contractor Installed

Each exhaust hood shall be a wall mount hood, measuring overall approximately 6'-0" long x 4'-6" front to back x 2'-0" high. Hoods shall be in accordance with Detail #B4/QF502. Each hood shall include an integral 3" air space on the rear. Exhaust hoods shall be installed with the bottom edge at 6'-8" above the floor. Exhaust hoods shall be the same as specified for Item #39 including the same ultra violet light technology, materials, construction, cartridges, code approvals, hanger rods, closure panels, make-up air plenum, control panel and lights. All exhaust hoods throughout the project shall be by the same manufacturer. Specifications are based on Caddy Model #SH-BCU-PA-I exhaust hood.

4.87 #72 Fire Suppression Systems

Contractor Furnished - Contractor Installed

Four fire suppression systems shall each serve one exhaust hood, Item #71 and the equipment below. Four fire suppression systems shall each serve one exhaust hood, Item #71 and one adjacent exhaust hood, Item #71a and the equipment below. Systems shall otherwise be the same as specified for Item #41.

4.88 #73 Not Used4.89 #74 Pastry Storage Cabinets

Government Furnished - Government Installed

Each pastry storage cabinet shall be an aluminum enclosed cabinet measuring approximately 23" x 29-3/8" x 69-1/4" high. Each unit shall have 41 pairs of 5/8" wide extruded aluminum slides to hold 18" x 26" sheet pans, spaced 1-1/5" on center. Cabinets shall have solid bottom constructed of .125" aluminum with rolled edge base. Base shall be furnished with a full perimeter non marking bumper. Cabinets shall have a .125" thick PVC coated aluminum door with bakery hinges, 270 degree door swing, stainless steel gravity latch and card clip. Cabinets shall be mounted on 5" diameter swivel casters. Specifications based on Piper Model #941.

4.90 #75 Dessert Counters

Contractor Furnished - Contractor Installed

Each dessert counter shall be a modular serving counter by the same manufacturer as the other modular counters in the serving area. The appearance of all of the counters shall match. The counter top shall measure overall 77-1/2" long x 30-1/2" wide x 35" high to working level. The top shall be constructed of 16 gauge stainless steel. Both ends of each top shall be without interlocking devices. A stub wall with stainless steel tray slide (Item #77a) shall be located in front of each salad bar counter. Dropped into the counter top shall be a 9" deep self contained insulated refrigerated pan with side refrigeration coils. The refrigerated pan shall be equipped with food pan supports recessed 3" below the top. The refrigerated pan shall have a stainless steel interior liner with coved corners and a 3/4" drain with strainer and drain valve. Drain line shall be extended to a floor drain below under the plumbing sections of the contract documents. The insulation around the refrigerated pan shall be covered with a 22 gauge galvanized outer shell. The 1/2 H.P. compressor shall be mounted in a galvanized compressor housing mounted to the bottom of the insulated pan and shall be wired 120-60-1 phase. The counter top shall be mounted on a counter body with a 1-1/4" x 1-1/4" square stainless steel tubing frame

of all welded construction. The front and both ends of the counter shall be enclosed with stainless steel panels. The rear of the counter base shall be equipped with sliding stainless steel doors. The interior of the base, other than below the compressor, shall be equipped with a bottom stainless steel undershelf. The counter shall be mounted on 5" diameter non-marking rubber tired swivel type ball bearing casters. The two casters on the rear side of the counter shall be equipped with toe-activated brakes.

Mounted to the top of each dessert counter shall be a double deck display stand measuring 77" long x 21-1/2" wide x 23-1/4" high. Double deck display stand shall be constructed of 1" square stainless steel posts secured to the counter top with concealed mounting bolts on the underside. Posts shall be sealed to the top. Each unit shall have a glass shelf at 14" and 23-1/4" above the counter top. Front of unit, just below each glass shelf, shall have a 6" wide glass sneeze guard mounted on stainless steel pivoting brackets. Glass shelves and sneeze guards shall have stainless steel channel edging. The underside of each shelf shall have a row of fluorescent lights extending the full length. Lights shall be complete with fluorescent tubes with clear plastic safety shields with end caps. Lights shall be wired 120-60-1 phase and shall have an on-off switch.

Each dessert counter shall be furnished with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. The equipment contractor shall furnish a one year refrigeration service policy on a local level. Specifications are based on Atlas Model #CWRM-5 with #RPS-5 sliding doors, #DDL-5 double deck display stand with fluorescent lights and a #US3 undershelf.

4.91 #76 Not Used

4.92 #77 Not Used

4.93 #77a Tray Slides

Contractor Furnished - Contractor Installed

Tray slides shall be custom fabricated in the size, shape and arrangement as shown on plan. Tray slides shall accommodate 14" x 18" trays. Four tray slides shall measure approximately 28'-8" long x 14" wide and four tray slides shall measure approximately 27'-8" long. The tray slides shall be constructed of 14 gauge stainless steel. Front edge of tray slide shall have a 1/2" high inverted V rim with a 2" deep turn down edge on the customer side. Tray slide shall have two 1/2" high inverted V ribs extending the full length. The front corners of the tray slide shall be chamfered as shown on plan. The rear edge of the tray slides shall be formed down and anchored to the rear side of the blocking. The ends of the tray slides shall fit tight against the building walls and shall be sealed. The tray slides shall be mounted to the partial height wall with 4" high 14 gauge stainless steel brackets spaced 3'-0" on center. Brackets shall be secured to the tray slide and counter base.

The rear side of the partial height wall below the tray slides shall be covered with 18 gauge stainless steel panels. Panels shall lap under the rear turn down edge of the tray slide and shall extend down to the top of the quarry tile base. Panels shall be secured with mastic in a concealed manner. The top of the wall where it wraps around at each end of the tray slide shall have a 14 gauge stainless steel top cap matching and aligning with the tray slide. Tray slides shall otherwise be constructed in accordance with Section 2 of the specifications.

4.94 #78 Not Used4.95 #79 Toasters

Government Furnished - Government Installed

Each toaster shall be a vertical conveyor type with a capacity of 960 slices per hour, measuring overall 22" wide x 17-5/8" deep x 33" high. Conveyor shall have wire carriers to hold three slices of bread or three buns side by side. Toasters shall be capable of handling a maximum product size of 1-1/4" thick. Toasters shall be constructed with stainless steel exterior and fiberglass insulation and shall have a heated toast collector pan and crumb tray. The toasters shall have heavy duty gear motor and drive chain. Toasters shall be wired 208-60-1 phase with a 4'-0" long cord and NEMA #6-30P plug. Each toaster shall have 5,000 watt metal sheathed heating elements. Toasters shall have a toast selector knob, variable speed control and manual advance. Specifications are based on Hatco Model #TK-100.

4.96 #80 Beverage Counters with Troughs

Contractor Furnished - Contractor Installed

Beverage counters shall be custom fabricated in the size, shape and arrangement as shown on plan. Each counter shall measure overall approximately 15'-0" long x 4'-2" wide x 2'-10" high. The customer side of each counter shall have a stainless steel tray slide mounted to the counter front. Each counter top shall be 3'-0" front to back and shall be constructed of 14 gauge stainless steel with a 4" high x 1" thick backsplash on the rear. Top shall have a 1-1/2" square turn down edge on front and both ends. The edge of top abutting the tray slide shall overlap the rear edge of the tray slide. The joint between the top and tray slide shall be tight and shall be sealed for the full length. The tray slide shall be 14" wide and shall be constructed of 14 gauge stainless steel with a 1/2" high inverted "V" edge on the front with a 2" square turn down on the front and 1-1/2" on both ends. Top of tray slide shall have two full length inverted "V" ribs, 1/2" high. The front corners of the tray slide shall be chamfered as shown on plan. The rear edge shall be formed up under the turn down edge of the top. The tray slide shall be supported by 14 gauge stainless steel solid type brackets as shown on detail.

Integrally welded in the top of each counter in location shown on plan shall be two drip troughs measuring 3'-0" long and 7'-8" long x 5" wide x 2" deep. Each trough shall be scored and pitched to a 1" diameter stainless steel drain outlet located at the end nearest the floor drain. A 1" drain line shall be extended from each drain to the floor drain below under the plumbing sections of the contract documents. Each drip trough shall be provided with a 5" wide, 2" high, removable, non-splash, stainless steel, drip plate. Top of each counter shall be adequately underbraced to support the weight of the beverage equipment. All openings required in the top for utility lines shall be die formed up and shall be sized to fit each line.

Base of each counter shall be constructed of 18 gauge stainless steel and shall be enclosed on front and ends and open on the rear side against the wall. Base shall have 6" overhang on the front edge below the tray slide, and 2" overhang on both ends. The front of each counter, below the tray slide brackets, shall have a series of 18 gauge stainless steel double pan hinged doors. Doors shall extend the full length of the counter and shall be equal in width. Each door shall be no more than 30" wide. Each door shall have a full height stainless steel piano hinge and a pull constructed of 14 gauge stainless steel, secured to the top edge of the door panel. Each pull shall be approximately 12" long and shall be formed out from the

door face 1" and down 1" on a 60 degree angle. The interior of each base shall have a full length 16 gauge stainless steel bottom undershelf measuring 30" front to back. Sides and rear of each undershelf shall be formed up 1-1/2" square and the sides shall be tack welded and sealed to the body. The rear corners of each undershelf shall be welded closed. Counter shall be mounted on 6" high, 1-5/8" diameter stainless steel legs with adjustable stainless steel feet. Beverage counters shall otherwise be constructed in accordance with Part 2 of the specifications.

4.97 #81 Not Used

4.98 #82 Fruit Juice Dispensers
Government Furnished - Government Installed

Each juice dispenser shall be a twin 5 gallon non-carbonated drink dispenser with individual removable transparent Lexan beverage bowls with gallon and liter markings. Juice dispensers shall measure 16" wide x 17" deep x 26-5/8" high. Juice dispensers shall have a plastic and stainless steel cabinet and shall be furnished without the standard removable drip tray and with an extended front panel so that the dispensers can overhang the drain trough built into the counter top. Juice dispensers shall have a single motor to drive both the condensing unit fan blade and a magnetic spray pump which shall constantly circulate the beverage over the cooling surface and up to the top of the bowl. Dispensers shall have a 1/5 horse power hermetically sealed refrigeration system. Dispensers shall be wired 120-60-1 phase with cord and plug. Specifications are based on Cornelius/Jet Spray Model #JT20.

4.99 #83 Sandwich Units with Sneeze Guards
Government Furnished - Government Installed

Each sandwich refrigerator shall measure overall approximately 48" long x 33" deep x 34" high to working level. Unit shall be by the same manufacturer as the reach-in refrigerators and freezers throughout the project. Unit shall have 22 gauge stainless steel front, top and sides and galvanized steel back and bottom. Interior shall be constructed of gray pre-coated metal, insulated with 2" insulation on the top, bottom and all sides. Top shall have a 12" wide full length white poly cutting board. Unit shall have an opening at the rear to accommodate (12) 1/6th size 4" deep plastic insert pans which shall be furnished with the unit. Pan opening shall have a stainless steel pivoting cover which can be set in either the open or closed position. Unit shall have 13.1 cubic feet refrigerated storage in the base with a pair of hinged doors on the front. Doors shall have stainless steel exterior, ABS plastic interior and full length handles. Interior shall have two powder coated wire shelves behind each door. Cabinet shall be mounted on heavy duty ball bearing urethane tire casters, two with brakes.

Sandwich refrigerator shall have a self-contained front breathing refrigeration system mounted in a compartment at the rear of the base. Refrigeration system shall cool the cabinet interior as well as provide cold air to the bottom and all sides of the ingredient pans without drying the ingredients. Unit shall have a 1/4 HP hermetically sealed compressor using R134A refrigerant. Evaporator coil shall be mounted on the interior of the cabinet and coated for protection against corrosion. Refrigeration system shall have a hot gas type condensate evaporator and shall not have an electric heater or drain connection. Sandwich refrigerator shall be wired 120-60-1 phase with an electrical cord and NEMA #5-15P plug. Sandwich refrigerator shall be supplied with a one year refrigeration service

policy. Specifications are based on a Traulsen Model #UPT4812.

Each unit shall be provided with a sneeze guard consisting of a full length angled acrylic panel supported by stainless steel posts secured to the rear of the refrigerator. Sneeze guard shall overhang the front of the sandwich refrigerator and shall allow self-service of cold food when the unit is rolled up to the tray slide.

4.100 #84 Ice and Soda Dispensers
Vendor Furnished - Vendor Installed

4.101 #85 Not Used

4.102 #86 Not Used

4.103 #87 Milk Dispensers
Government Furnished - Government Installed

Each milk dispenser shall be a triple container refrigerated dispenser. Each dispenser shall accommodate 3, 5 or 6 gallon single service bag and box containers. Each dispenser shall measure overall 36-1/8" wide x 17-1/8" deep x 40-1/4" high. Each dispenser shall have stainless steel exterior except the rear which shall be galvanized. The dispensers shall have stainless steel interior with an 18 gauge stainless steel interior bottom. The hinged door on the front of each dispenser shall have stainless steel interior and exterior complete with temperature indicator and chrome plated lift-off hinges and latch. Each dispenser shall have a hermetically sealed refrigeration system with copper tube cold wall evaporator connected to a 1/5 H.P. compressor wired 120-60-1 phase with cord and plug. Each dispenser shall have an adjustable temperature control. Each dispenser shall have glass locators mounted on the apron and three lift valve dispensers. The refrigerant piping shall be extended to the pinch point in the valve housing to an aluminum insert that conducts the cold to the dispensing tube. Each dispenser shall have UL and NSF approvals. Milk dispenser shall be supplied with a one year refrigeration service policy. Specifications are based on Silver King Model #SK3 Imperial.

4.104 #88 Cup and Glass Rack Dispensers
Government Furnished - Government Installed

Each rack dispenser shall be a cantilever style mobile dispenser for 20" x 20" cup and glass racks. Dispenser shall measure overall 23" x 31-1/2" x 36" high. Dispenser frame shall be constructed of heavy gauge steel finished with gray baked enamel over rust resisting undercoat. Frame shall be mounted on a 12 gauge stainless steel "Z" section base with four 4" diameter heavy duty double ball bearing swivel casters with polyurethane tires. The base of the dispenser shall have a one piece, wrap-around, non-marking vinyl bumper. The body of the dispenser shall be 20 gauge stainless steel and shall have a stainless steel tubular push handle. The front panel shall be removable for adjustment access.

The rack carrier shall be constructed of all welded 16 gauge stainless steel. Carrier shall be supported by a series of coil springs attached to the frame. Dispenser shall have ball bearing guides, a stainless steel aircraft type cable and pre-lubricated plated steel pulleys to keep the carrier level in all directions, even with an unbalanced load. The dispensing height of varying weights of racks shall be adjustable by removing the front panel and engaging or disengaging individual springs as required. Springs shall be adjusted to accommodate the Owner's trays. All

dish, tray and rack dispensers throughout the project shall be by the same manufacturer. Specifications are based on a Piper/Servolift Model #ACCA-ST-2020.

4.105 #89 Not Used

4.106 #90 Not Used

4.107 #91 Floor Troughs with Grate
Contractor Furnished - Contractor Installed

Floor troughs with grate shall each be 48" long x 18" wide x 4" deep and shall be located as shown on plan. Troughs shall be in accordance with Detail #D4/QF501. Drain troughs shall be constructed of 14 gauge, type 304, 18-8 stainless steel polished to a #4 finish. Drain troughs shall have coved corners and all joints and seams shall be integrally welded, ground and polished. Drain troughs shall have a 3/4" wide integral flange around the perimeter and a 1" wide integral support ledge at the front and rear. Drain troughs shall be set into the floor with the flange and grate flush with the surrounding floor level. Drain troughs shall have a 2" waste connection and shall be complete with an integrally welded sump drain with removable stainless steel sediment basket. Drain troughs shall be furnished with a two piece removable stainless steel subway type grate. Grate shall have 3/16" x 1" bearing bars running from front to rear to reduce splash. Specifications are based on IMC/Teddy Model #FT drain troughs with #SG grate.

4.108 #92 Ice Making Machines
Contractor Furnished - Contractor Installed

Ice machines shall be by the same manufacturer as the other ice machines throughout the project. Ice machine shall be a cube type ice maker with an Air Conditioning and Refrigeration Institute certified production capacity of 1,610 pounds of ice per 24 hours at 90 degrees F. air temperature and 70 degrees F. water temperature in accordance with ARI Standard 810. Ice machine shall have stainless steel exterior panels. Ice machine shall measure overall 48" wide x 24-1/2" deep x 29-1/2" high. Ice machine shall produce rhomboid shaped cubes measuring 3/8" x 1-1/8" x 7/8". Ice machine shall have an ice thickness control to assure uniform ice thickness without using pressure controls and thermostats or requiring adjustments for fluctuation in air or water temperatures. The evaporator shall be vertical and ice shall be harvested by gravity without mechanical assistance. Ice machine shall be wired 208-60-3 phase.

Each ice machine shall have a remote air cooled condenser located on the building roof. Each condenser shall measure 28" x 30" x 38" high. Each unit shall have a vertical discharge condenser mounted on legs with 20" clearance below. Condenser shall be furnished with pre-charged refrigeration lines with quick-connect fittings to connect the condenser to the ice machine. The condenser shall be wired 208-60-1 phase and the power shall be supplied from the ice machine.

Furnished with each ice machine shall be a water filter assembly by the same manufacturer as the ice machine. Filter assembly shall be sized to accommodate the ice machine and shall include two primary filters connected in parallel plus a pre-filter. Filter assembly shall measure overall approximately 16" wide x 5" deep x 21-1/4" high. Water filter assembly shall be mounted to the wall beside the ice machine as indicated on plan. Filters shall have polypropylene outer housings and shall be mounted on a

powder coated galvanized steel support with inlet and outlet fittings and a pressure gauge. Primary filters shall have 1 micron particle reduction. Filter media shall be graded density carbon block with 40 grams of Siliphos scale inhibitor per cartridge. Pre-filter shall provide dirt, rust and sediment reduction.

Each ice machine shall be mounted on an ice bin with a nominal storage capacity of 1,114 pounds. Ice bin shall be by the same manufacturer as the ice maker. Ice bin liner shall be seamless polyethylene. The body of the ice bin shall be 48" wide x 34" deep x 56" high including legs. Front of bin shall have the center section extending out another 8" with a hinged lid on top. Area above the hinged lid shall have two sliding doors. Ice bin shall have stainless steel exterior finish to match the ice maker and shall be mounted on 6" high stainless steel legs with adjustable feet. Ice maker shall be mounted to the top of the ice bin in accordance with the manufacturer's recommendation. The bin shall be equipped with any adapters and deflectors necessary to mount the ice maker on top. Ice machine shall be furnished with a one year refrigeration service policy on a local level. Ice machine shall be equipped with the manufacturer's standard equipment. Specifications are based on Manitowoc Model #SY-1894N maker, Model #JC-1395A remote condenser, Model #AR-40000 with #AR-PRE water filter assembly and Model #B-1100 bin.

4.109 #93 Not Used

4.110 #94 Bulk CO2 Tank
Vendor Furnished - Vendor Installed

4.111 #95 Coffee Brewers
Contractor Furnished - Contractor Installed

Each coffee brewer shall be a twin 3 gallon thermal coffee brewing system. Brewer shall have two brewing heads which shall brew directly into removable 3 gallon thermal dispensers. Brewer shall have 18 gauge stainless steel construction with front service access and shall measure overall approximately 35-1/2" wide x 21-1/2" deep x 40" high. Brewer shall have two stainless steel brew baskets with double safety locks. Brewer shall have a 14 gallon water tank with six 3,000 watt heating elements and shall be wired 120/208-60-3 phase. Brewer shall have a capacity of 11.2 batches per hour using cold water. Brewer shall be fully automatic with electronic temperature control and shall brew in 3 gallon batches. Brewer shall also be furnished with a half batch brewing option. Brewer shall have a hot water faucet on the front.

Each brewer shall be furnished with two 3 gallon thermal dispensers. Dispensers shall have exterior body and interior liner made entirely of stainless steel and shall be 11" diameter x 23-3/4" high. Dispensers shall have twist lock cover with safety lock, top carry handle, beverage level gauge, gauge vent cap, funnel vent cap, guard protected faucet and side mounted moving handles. Specifications are based on Fetco Model #CBS-62H30-5 brewers with Luxus #TPD-3.0 dispensers.

4.112 #96 Coffee Urn
Contractor Furnished - Contractor Installed

Coffee urn shall be a fully automatic electric heated coffee brewer and dispenser with twin 10 gallon coffee vessels. Coffee urn shall measure overall 42" wide x 21-1/2" deep x 35" high. Coffee urn shall be constructed of 304, 18-8 stainless steel and shall have a dial thermometer with marked

brew zone. Coffee urn shall be capable of brewing up to 90 gallons per hour. Coffee urn shall be wired 120/208-60-3 phase and shall have 11.5 K.W. heating elements. Coffee urn shall have automatic refill of water jacket, automatic coffee agitation and adjustable by-pass. Coffee urn shall have control panel on right with cycle start-stop switch, thermostat adjustable from 197 to 204 degrees F. and a push button for full batch or half batch operation. Coffee urn shall be equipped with NSF covers and stainless steel brew basket to accommodate paper filters. Coffee urn shall be equipped with coffee and water faucets with glass gauges. Coffee urn shall otherwise be equipped with the manufacturer's standard equipment. Specifications are based on Cecilware Model #FE-300 coffee urn.

4.113 #97 Urn Stand

Contractor Furnished - Contractor Installed

Urn stand shall be custom fabricated in the size, shape and arrangement as shown on plan. Urn stand shall be 48" long x 38" wide x 34" high. The stand shall have a stainless steel shelf for beverage containers on the front. Counter top shall be 24" front to back and shall be constructed of 14 gauge stainless steel with an 8" high x 2" thick backsplash on the rear. Top shall have a 1-1/2" square turn down edge on front and each end. Beverage container shelf shall extend 14" beyond the front edge of the top and shall be located approximately 14" below the top. Shelf shall be located to accommodate the beverage containers used by the government. Shelf shall be constructed of 14 gauge stainless steel with the front and both ends formed down 1-1/2" square and the rear edge formed up below the turn down edge of the top. The joint between the turn down edge of the top and the rear turn up of the shelf shall be sealed. Each end of the rear turn up of the shelf shall be hemmed. The shelf shall have an integral drain trough measuring 30" x 5" x 2" deep located below the coffee urn faucets as shown on the plan. Drain trough shall be provided with a 5" wide, 2" high, removable, non-splash, stainless steel, drip plate. Drain trough shall have built-in pitch to the end nearest the floor drain which shall have an open drain. Drain line shall be extended below the undershelf to the floor sink under the plumbing sections of the contract documents. The front shelf shall be supported by 14 gauge stainless steel solid type brackets integrally welded to the legs. Urn stand shall have an open tube base with four 1-5/8" stainless steel legs with stainless steel adjustable feet and a 16 gauge stainless steel bottom shelf integrally welded to the legs. Front legs of stand shall be located below the beverage container shelf. Urn stand shall otherwise be constructed in accordance with Part 2 of the specifications.

4.114 #98 Bulk Juice Dispensers

Vendor Furnished - Vendor Installed

4.115 #99 Cappuccino Dispensers

Vendor Furnished - Vendor Installed

4.116 #100 Ice Cream Cabinets

Vendor Furnished - Vendor Installed

4.117 #101 Tray Accumulators

Contractor Furnished - Contractor Installed

Each tray accumulator shall be constructed in the size, shape and arrangement as shown on plan, measuring overall approximately 23'-6" long x 7'-7-3/4" wide x 2'-10" high to working level. Tray accumulator shall have a 14 gauge type 304 stainless steel top with the edges abutting the building walls formed up into a 10" high x 2" thick backsplash. The free

edges of the top shall be formed up into a 3" high x 1-1/2" wide square channel rim. Edge of top shall be extended through the wall opening and formed down approximately 2" on the customer side and formed back to wall and completely sealed. Tray accumulator shall include a stainless steel window frame and sight and sound barrier with lights above tray drop area. Accumulator shall have a stainless steel open tube base with 1-5/8" stainless steel legs and rails. Working side of base shall be without cross rails. Front legs shall have stainless steel flanged feet secured and sealed to the floor.

Formed integrally into the working side of the accumulator top in the location, length and arrangement as shown on the plan, shall be a 12" wide scrapping trough. Trough shall be constructed of 14 gauge stainless steel and shall be 3" deep at the inlet end and pitched to approximately 7-3/4" deep at the end near the pulper. The shallow end of trough shall be vertical and shall be fitted with a trough end flush nozzle furnished with the pulper. The rear edge of the trough shall have three gusher heads furnished with the pulper. Gusher heads shall be located at each scrapping station as shown on plan. The end of the trough near the pulper shall be approximately 26-1/4" above the floor. The end of the scrapping trough shall have an angled transition to fit the inlet on the pulper. The end of the trough shall have a flange to mate with the flange on the pulper.

Tray accumulator shall have 26 tray carriers revolving counter-clockwise as shown on plan. Tray carriers shall be constructed of 14 gauge stainless steel with two load bearing wheels at the top and two stabilizing wheels at the bottom. Wheels shall have stainless steel bearings and urethane molded tread. Each carrier shall hold five stainless steel wire shelves sized to accommodate 14" x 18" trays. Wire shelves shall be slightly wider than 14" so that the trays are held with the 14" dimension parallel to the length of the accumulator. Each shelf shall be constructed of 1/4" type 304 stainless steel wire and shall be individually attached and removable without tools for cleaning. Shelf attaching mechanism shall prevent accidental dislodging if jolted from underneath.

Tray accumulator shall have a variable speed V-belt drive system consisting of 1/2 HP motor, gear reducer, 1-1/4" shaft, heavy duty bearings and c-hubbed sprockets. Tray carriers shall be mounted on a corrosion resistant chain riding in lubricated-for-life runners. Drive motor shall be controlled by an across the line starter and electronic programmable controller to provide full motor protection, brake action and soft current starting. Electrical circuitry shall incorporate short circuit over-load and under-voltage protection and 24 volt external control devices. Accumulator shall include two photoelectric eyes for customer and dish room personnel safety. Accumulator shall have a NEMA-4X master control panel with main disconnect, motor starters, transformer, control relay and terminal strip. Control panel shall be provided with emergency disconnect switch with locking door panel. Accumulator shall be wired 208-60-3 phase. Tray accumulator shall be UL Listed and built to NSF standards. Tray accumulator shall be by the same manufacturer as the bussing conveyor, Item #103. Specifications are based on Traycon Model #OTC-26-5-L.

4.118 #102 Bridges

Contractor Furnished - Contractor Installed

Bridges shall be custom fabricated in the size, shape and arrangement as indicated on the plan, measuring overall approximately 30" wide x 42" long x 37-1/2" high. Bridges shall overlap the edge of the bussing conveyor, Item #103 and shall extend almost to the edge of the tray accumulator, Item

#101, as shown on drawing. The top shall be constructed of one piece 14 gauge stainless steel with one edge formed down 1-1/2" square over the rim of the roller conveyor. All other edges shall be formed up into a 1-1/2" high x 1-1/2" wide square channel rim. The underside of each bridge shall have a 1-1/2" x 1-1/2" 14 gauge stainless steel angle to hold the bridge in position on the roller conveyor rim. The bridges shall be capable of sliding along the length of the roller conveyor and shall be removable. The bottom of each bridge shall pitch toward the roller conveyor. Each bridge shall be mounted on an open tube base with rails on the rear and ends and open on the working side facing the pulper, Item #24. Each leg shall be fitted with a swivel caster.

Mounted to the top of each bridge shall be an angled cup and glass rack shelf. Shelf shall measure approximately 42" long and shall be constructed of one piece 14 gauge stainless steel with the front edge formed into a 1-1/2" wide drain trough, with a 1-1/2" wide square channel rim. The rear edge shall be formed down 1-1/2" square. Ends of shelf shall be welded closed with 14 gauge stainless steel filler panels formed to the front and rear edges. Shelf shall be pitched to the end closest to the bussing conveyor with the low end of trough fitted with a 1" O. D. stainless steel drain tube welded integrally to trough. Drain line shall be extended back on an angle, then extended straight down to drip on the top of the bridge near the rear rim. Shelf shall be mounted on two 1-1/2" square stainless steel posts integrally welded to the rear rim. Rear rim shall be provided with extra support as required to hold the rack shelf without deflection. Shelf shall be secured to the posts with 14 gauge stainless steel all welded solid cantilever brackets of approved design. Shelf shall be constructed on a 25 degree angle with the bottom of the shelf approximately 16" above working level. Shelf shall be designed to hold 20" x 20" cup and glass racks. Bridges shall be constructed in accordance with Part 2 of the specifications.

4.119 #103 Bussing Conveyors
Contractor Furnished - Contractor Installed

Each bussing conveyor shall be a dual slat belt conveyor measuring overall approximately 15'-0" long x 2'-6" wide x 2'-10" high. Conveyor shall have a 14 gauge type 304 stainless steel top with the rear edge formed up into a 3" high x 1-1/2" square channel rim. The edge facing the tray accumulator, Item #101 and each end of the conveyor shall be formed up into a 1" high x 1-1/2" wide square channel rim.

Bussing conveyor shall have "H" shaped leg sets located approximately 5'-0" on center. Legs shall have front to back rails and a center longitudinal rail. Legs and rails shall be constructed of 1-5/8" diameter stainless steel tubing integrally and continuously welded together. Legs shall have stainless steel flanged feet secured and sealed to the floor. Conveyor shall have an 18 gauge stainless steel drive enclosure with two double pan insulated hinged removable doors. The remainder of the conveyor shall have 18 gauge stainless steel removable skirting panels.

Conveyor shall have two 10" wide straight belts with unbreakable slats with integral chain configuration to operate on #60 sprockets. Belting shall be elevated 1/4" above the top slider pan and shall run on replaceable lubricated-for-life runners mounted in rolled formed stainless steel channel welded to top slider pan. Belts shall have a continuous return track with lubricated-for-life runners and 18 gauge stainless steel drip pan sloped 1/8" per foot minimum to the belt washer. Conveyor shall have a 14 gauge stainless steel wash tank with perforated scrap drawer, 1-1/2"

drain outlet, automatic detergent injector system, wash cycle timer and 12 hot water spray jets to spray top and bottom of belts. Conveyor shall have one drive system with 1-1/4" stainless steel sprocket shafts, 7" diameter stainless steel sprockets, pillow block type main bearings with neoprene seals located in a water free location, and automatic belt take-up mechanism. Drive system shall have a 3/4 HP variable speed motor with electronic control and dynamic braking. Motor shall have stainless steel protective cover. Speed control shall have a water tight hinged cover. Drive motor shall be controlled by an across the line starter and electronic programmable controller to provide full motor protection, brake action and soft current starting. Electrical circuitry shall incorporate short circuit over-load and under-voltage protection and 24 volt external control devices. Conveyor shall have a NEMA-4X master control panel with main disconnect, motor starters, transformer, control relay and terminal strip. Control panel shall be provided with emergency disconnect switch with locking door panel. Bussing conveyor shall have an on-off switch located on the end next to the entrance of the dishwasher, Item #104. Bussing conveyor shall be wired 208-60-1 phase. Bussing conveyor shall be UL Listed and built to NSF standards. Bussing conveyor shall be by the same manufacturer as the tray accumulator, Item #101. Specifications are based on Traycon Model #SDL-10-2-EV15.

4.120 #104 Dishwashing Machines
Contractor Furnished - Contractor Installed

Each dishwasher shall be a fully automatic flight type machine consisting of a 5'-0" loading section with power recirculating pre-wash, an 8'-0" power wash, power rinse and fresh water final rinse section, and a 9'-0" unloading section. Dishwasher shall measure overall approximately 22'-10-1/2" long x 46-1/4" wide with the load and unload height to be 3'-0-1/2" high. Dishwasher shall be designed for left to right operation. The pre-wash, power wash, power rinse and final rinse compartments shall have splash baffles and flexible plastic strip curtains. Tanks and chambers shall be heavy gauge stainless steel with exposed surfaces polished to a #3 finish. Top and rear shall have double wall construction. Dishwasher shall have a stainless steel frame, legs and feet and shall be furnished with stainless steel lower panels on the front and rear. The conveyor shall have stainless steel side links, tie rods and conveyor tracks. The flight links shall be injection molded resilient duraflex.

Dishwasher shall have self draining recirculating stainless steel pumps with stainless steel impellers. The pump motors shall be totally enclosed and fan cooled. The pump housings shall have easy removable cover plates for access to impellers. Motors shall be built by the dishwasher manufacturer and shall have grease packed ball bearings and inherent overload protection. Pre-wash motor shall be 3 HP, with a pump capacity of 150 gpm. The power wash and power rinse motors shall each be 3 HP with a pump capacity of 292 gpm. The conveyor motor shall be 1/2 H.P. The operation of the pumps and the final rinse shall stop when the conveyor stops. Dishwasher shall be wired 480-60-3 phase and shall have a 115 volt pilot circuit with a full length wireway and locking style connectors between sections.

Pre-wash section shall have flush down nozzles at the end. Pre-wash and power wash and power rinse sections shall be provided with easily removable stainless steel upper and lower wash arm manifolds with specially shaped nozzles with large openings. Each tank shall have one piece perforated stainless steel scrap screens sloping to a deep scrap basket. Manual drain valves shall be controlled from the front of the machine and shall be

automatically closed when the inspection doors are closed. The hinged, insulated inspection doors shall be the full width of each chamber. Dishwasher shall be furnished with a common hot water connection, a common drain connection at the load end and a cold water connection to the pre-wash section. The dishwasher shall have a common electrical connection point for motors and controls and electric tank heat with circuit breaker mounted in control box and shall be wired 480-60-3 phase with a total load of 91.5 Amps. The electric booster heater shall have a separate electrical connection with circuit breaker and shall be wired 480-60-3 phase. The conveyor shall be 30-1/2" wide and have variable speed from 4 to 6.3 feet per minute. Dishwasher shall have a stainless steel vertical control panel on the side of the machine with power on-off switches, sealed dial type thermometers for the pre-wash, power wash, power rinse and final rinse temperatures and start-stop switches. Additional start-stop switches shall be located at each end of the machine. Dishwasher shall have an automatic initial fill system and pre-wash temperature control.

Final rinse consumption shall not exceed 168 GPH. at 20 psi flow pressure. Dishwasher shall have a factory mounted electric booster heater sized to boost the incoming water to a final rinse temperature of 180 degrees F. Booster heater shall have electric thermostat control, water pressure relief valve, water pressure reducing valve and pressure/temperature gauge for incoming water.

Dishwasher assembly and installation shall be supervised by authorized factory personnel. Specifications are based on a Hobart Model #FT-922 (5-8-9).

4.121 #105 Pulp Containers
Government Furnished - Government Installed

Each pulp container shall be a 32 gallon round gray polyethylene trash container with a twist-off round dolly with casters secured to the bottom. Trash bins shall measure overall 22" in diameter x 30" high including dolly. Specifications are based on Rubbermaid Model #2632 trash bins and Model #2640 dollies.

4.122 #106 Dollies
Government Furnished - Government Installed

Rack dollies shall be of molded polyethylene construction with each measuring 20-3/8" x 20-3/8". The polyethylene platforms shall be mounted on 3" diameter all swivel casters without brakes. Each dolly shall be in one of the manufacturer's standard colors. Each dolly shall accommodate the government furnished cup and glass racks. Each dolly shall be equipped with all standard equipment. Specifications are based on Cambro Model #CD-2020.

4.123 #107 Duct Extensions
Contractor Furnished - Contractor Installed

An 18 gauge stainless steel round all welded water tight duct extension shall be extended from the top of vent opening on each dishwasher to approximately 6" above the finished ceiling. The duct must fit inside the 16" vent opening on the dishwasher. Where the duct penetrates the finished ceiling, it shall be fitted with an 18 gauge 1-1/2" wide stainless steel circular all-welded flange to fit flush with the duct and ceiling. This stainless steel duct work shall be in accordance with Part 2 of these specifications.

4.124 #108 Soak Sinks

Government Furnished - Government Installed

Each portable soak sink shall be constructed of heavy duty, type 304 stainless steel and shall measure overall 26" x 26" x 34" high. The sink shall measure inside 22" x 22" x 8" deep with 3/4" coved corners and with the top edge formed with a 2" x 1" square die embossed no-drip counter edge with a 1/2" return on all sides. The sink shall be equipped with a 2" twist handle drain. The sink shall be mounted on stainless steel tubular legs and rails. The legs shall be equipped with 5" diameter swivel casters, two fitted with brakes. The portable silver sink shall be equipped with all standard equipment and shall be in accordance with this manufacturer's standard specifications. Specifications are based on Advance Model #9-FMS-20.

4.125 #109 Service Sinks, Floor Mounted

Contractor Furnished - Contractor Installed

Service sinks shall each be constructed of 16 gauge, type 304 stainless steel with a deep drawn seamless sink bowl with a "V" edge on three sides. The rear edge shall be formed up into a tile edge. Each sink shall measure overall 33" wide x 25" front to back x 10" high. Sink bowl shall be 28" x 20" x 6" deep. Each sink shall be provided with a 3" diameter drain instead of the standard 2" drain. Each service sink shall be equipped with service faucet, mop hanger, hose and bracket. Specifications are based on Advance Model #9-OP-28 service sink and accessories.

4.126 #110 Not Used4.127 #111 Not Used4.128 #112 Not Used4.129 #113 Clean/Sanitizing Machines

Government Furnished - Government Installed

Clean/sanitizing machines shall be by the same manufacturer as the wall mounted pressure cleaning system specified for Item #29. Pressure sprayers shall be a portable electric unit with 36" spray wand assembly with dual jet spray nozzles to provide high pressure rinse and low pressure wash, selectable at the spray gun. Pressure sprayers shall have a chemical selector valve for selecting and metering 2 chemicals (soap and sanitizing solution). Pressure sprayers shall be mounted on a tubular frame with stainless steel top panel, 2 holders for 1 gallon chemical jugs, hose hanger, and 10" semi-pneumatic wheels.

Pressure sprayers shall be wired 120-60-1 phase and shall have a 2 H.P. totally enclosed, fan-cooled motor with ball bearings. Sprayers shall have a three cylinder direct drive plunger type pump with a capacity of 2.9 G.P.M. and adjustable pressure up to 850 P.S.I. at the pump head. Pressure sprayers shall be furnished with a 30' wire braid high pressure hose, a 25' 5/8" diameter reinforced water hose, and a 35' electrical cord set with built-in ground fault circuit interrupter. Portable pressure sprayers shall be furnished with all standard equipment. Specifications are based on a Spray Master Technologies Model #SMT-600-PE.

4.130 #114 Dish Carts

Government Furnished - Government Installed

Each dish cart shall be a stainless steel double sided unit with hinged cover. Each cart shall measure overall 35" long x 27" wide x 27" high including a wrap around bumper. Each cart shall have a two compartment enclosed stainless steel cabinet accessible on both sides. Cabinet shall be constructed of 18 gauge stainless steel with the rear and bottom sloped back on an angle to hold dishes in place. The bottom shelf size on each side shall be 31-3/4" long x 10" wide. Each unit shall have a 22 gauge stainless steel hinged top cover and transparent plastic removable double sliding doors stacked in vertical tracks and provided with lift handle and latch. Each unit shall be mounted on four 4" diameter all swivel casters with non-marking rubber tires. Specifications are based on Piper Model #D172-33.

4.131 #115 Not Used4.132 #116 Wall Mounted Flat Shelves

Contractor Furnished - Contractor Installed

Each flat wall shelf shall be custom fabricated in the size, shape and arrangement as shown on the plan, measuring 5'-0" long x 12" deep. Shelf shall be constructed of 16 gauge stainless steel with the front and right end formed down 1-1/2" square. The rear and left end shall be formed up 1-1/2" square against the wall and sealed. The shelf shall be mounted to the wall with two 14 gauge stainless steel solid type brackets stud bolted to the underside of the shelf and secured to the wall. Shelf shall be mounted to the wall 6'-0" above the finished floor.

4.133 #117 Tray Dispensers

Government Furnished - Government Installed

Each tray dispenser shall be a cantilever style mobile dispenser for 14" x 18" trays. Verify the exact size of the tray dispenser to match the trays to be used. Dispenser shall measure overall 17" x 29" x 50" high. Dispenser frame shall be constructed of heavy gauge steel finished with gray baked enamel over rust resisting undercoat. Frame shall be mounted on a 12 gauge stainless steel "Z" section base with four 4" diameter heavy duty double ball bearing swivel casters with polyurethane tires. The base of the dispenser shall have a one piece, wrap-around, non-marking vinyl bumper. The body of the dispenser shall be 20 gauge stainless steel. Mounted on top shall be a stainless steel sloped silverware dispenser, enclosed on all four sides and provided with eight openings approximately 4" in diameter, for round silverware cylinders. Furnished with each dispenser shall be 16 stainless steel perforated silverware cylinders to fit the openings in the dispenser.

The tray carrier shall be constructed of all welded 16 gauge stainless steel. Carrier shall be connected to a self-leveling suspension system consisting of stainless steel aircraft cable, plated steel pulleys fitted with shielded, grease packed ball bearings, and tempered chrome vanadium coil springs. The dispensing height of varying weights of trays shall be adjustable by use of a removable control handle that fits in a recessed socket on the side of the body. Specifications are based on a Piper/Servolift Model #ATCA-ST-OSW8.

4.134 #118 Bread Racks
Vendor Furnished - Vendor Installed

4.135 #119 Proofing Cabinet
Government Furnished - Government Installed

Proofing cabinet shall be an aluminum uninsulated enclosed cabinet measuring approximately 23" x 33" x 68-1/8" high. Unit shall have 34 pairs of 5/8" wide extruded aluminum slides to hold 18" x 26" sheet pans, spaced 1-1/5" on center. Cabinet shall have solid bottom constructed of .125" aluminum with rolled edge base. Base shall be furnished with a full perimeter non marking bumper. Cabinet shall have a .125" thick PVC coated aluminum door with bakery hinges, 270 degree door swing, stainless steel gravity latch and card clip. Cabinet shall be mounted on 5" diameter swivel casters.

Base of cabinet shall have a removable heating system with individual heat and moisture controls, digital read-out, 60 minute timer and stainless steel one gallon water pan. Proofing cabinet shall be wired 120-60-1 phase with cord and plug. Specifications based on Piper Model #934-H.

4.136 #120 Syrup Box Racks
Vendor Furnished - Vendor Installed

4.137 #121 Not Used

4.138 #122 Open Racks
Government Furnished - Government Installed

Each open rack shall be a universal angle rack measuring 24-1/2" wide x 25" deep x 56" high and shall be furnished with 12 pairs of universal angle slides. Top and bottom slides shall be welded to the rack frame. The remaining sets of slides shall be adjustable on 1-1/2" centers. Each set of slides shall hold (1) 18" x 26" pan or (2) 12" x 20" pans and all pans shall be supported on the bottom of the pan. The rack frame shall be constructed of all welded aluminum extruded channels with aluminum bolsters at the base for mounting the casters. Casters shall be all swivel with 5" diameter x 1-1/4 wide neoprene tires. Specifications are based on Cres-Cor Model #207-UA-12-AC racks.

4.139 #123 Heated Cabinets, Mobile
Contractor Furnished - Contractor Installed

Heated cabinets shall each be a double compartment unit measuring overall approximately 26-1/2" wide x 30-3/4" deep x 73-5/8" high. Interior of each compartment shall be 21-3/8" x 26-1/2" x 28-7/8" high. Each compartment shall have an 20 gauge stainless steel exterior and a 22 gauge stainless steel interior. Each compartment shall have a 20 gauge stainless steel door with a magnetic catch, hinged as shown on plan. Each compartment shall be furnished with stainless steel side racks with shelf rungs spaced at 1-3/4" centers. Each compartment shall have chrome plated universal pan slides to hold four 18" x 26" sheet pans or eight 12" x 20" pans. Cabinet shall have a full perimeter bumper and 5" diameter all swivel polyurethane tired casters, two with brakes.

Heated cabinet shall be wired 120-60-1 phase with a total load of 2,000 watts. Cabinet shall be furnished with an electrical cord and a NEMA #5-20P plug. Cabinet shall be heated with thermostatically controlled low density thermal cable wrapped around the walls of the compartment to provide

uniform heat distribution. Each compartment shall be separately controlled and the control panel shall have two on-off adjustable thermostats 60 to 200 degrees F., two indicator lights and two holding temperature gauges. Specifications are based on Alto Shaam Model #1200-UP/HD.

4.140 #124 Utility Carts
Government Furnished - Government Installed

Each utility cart shall be constructed entirely of stainless steel with an overall size of 22-3/8" x 38-5/8" x 37-1/8" high. Utility carts shall have three 18 gauge stainless steel shelves measuring 21" x 33" with three edges of shelves turned up and the front edge turned down. Utility carts shall have a 1" x 1" x 1/8" stainless steel angle frame with a push handle at one end and with bumpers on the handle and frame. Utility carts shall be furnished with four (4) 5" diameter swivel casters. Utility carts shall have a capacity of 650 pounds. Specifications are based on Lakeside Model #744 utility carts.

4.141 #125 Cook & Hold Cabinets
Contractor Furnished - Contractor Installed

Cook and hold cabinets shall each be a double compartment unit measuring overall approximately 24-1/2" wide x 32-3/4" deep x 76-1/2" high. Interior of each compartment shall be 18-7/8" x 26-1/2" x 26-3/4" high. Each compartment shall have a 22 gauge stainless steel exterior and an 18 gauge stainless steel interior. Each compartment shall have an 18 gauge stainless steel door with a magnetic catch, hinged on the left as shown on plan. Each door shall also be provided with a key lock handle. Each compartment shall be furnished with stainless steel side racks with shelf rungs spaced at 2-15/16" centers. Each compartment shall be furnished with three stainless steel wire shelves and a stainless steel drip pan on the bottom. Cabinet shall have an external drip tray with removable pan, full perimeter bumper and 5" diameter all swivel polyurethane tired casters, two with brakes.

Cook and hold cabinet shall be wired 208-60-1 phase with a total load of 6,000 watts. Cabinet shall be furnished without cord and plug which shall be furnished and installed under the electrical sections of the contract documents. Cabinet shall be heated with thermostatically controlled low density thermal cable wrapped around the walls of the compartment to provide uniform heat distribution. Each compartment shall be separately controlled and the control panel shall have two on-off switches, two cook thermostats 100 to 325 degrees F., two hold thermostats 60 to 200 degrees F. and two 12 hour cooking timers. Control panel shall also include two cooking indicator lights and two holding indicator lights. Specifications are based on Alto Shaam Model #1000-TH-I/HD.

4.142 #126 Prep Sink
Contractor Furnished - Contractor Installed

Prep sink shall be custom fabricated in the size, shape and arrangement shown on drawing, measuring overall approximately 9'-6" long x 2'-6" wide x 2'-10" high to working level. Top and sink compartments shall be constructed of 14 gauge stainless steel. Front and both ends of top shall be terminated in a 3" high x 1-1/2" diameter rolled rim. The rear edge of top abutting the wall shall be formed up into a 12" high x 2" thick backsplash.

Welded integrally into the center of the top shall be two sinks measuring inside approximately 24" x 24" x 12" deep. Each sink shall be fitted with a

twist handle drain with overflow. A 14 gauge stainless steel tab shall be stud bolted to the bottom of each sink to support the drain handle. Mounted to back splash and centered above the partition between the two sinks shall be a faucets with goose neck spout as specified in Section 2.

Top shall be mounted to an open tube base. Base below each drain board shall have a full length stainless steel undershelf. The base below the sinks shall be open to the floor with no rail bracing on the working side. Work table shall otherwise be constructed in accordance with Part 2 of these specifications.

4.143 #127 Refrigerators

Contractor Furnished - Contractor Installed

Each refrigerator shall be a single section reach-in unit with 24.2 cubic foot capacity, constructed by the same manufacturer as all other reach-in refrigerators and freezers on the project. Refrigerator shall be constructed of stainless steel on the front, doors, sides, and interior. The refrigerator shall measure overall 29-7/8" wide x 34" deep x 83-1/4" high including 6" high stainless steel legs with adjustable feet. Refrigerator shall have half height doors hinged as shown on plan with self-closing, gravity action, cam-lift hinges. The doors shall have a 120 degree stay open feature. The doors shall have a removable vinyl magnetic gasket and the door frame shall have anti-condensate heaters. The horizontal door handles shall be mounted over a recess in each door. Each door shall be equipped with a cylinder lock and key. The door hinges shall include a switch to automatically activate the interior incandescent lighting. The refrigerator cabinet and doors shall have non CFC foamed-in place polyurethane insulation. The interior shall be equipped with a total of five chrome plated wire shelves.

The refrigeration system shall be a top mounted self-contained unit consisting of a 1/3 HP condensing unit wired 120-60-1 phase. The refrigerant shall be R134a. Refrigerant shall be controlled by a thermostatic expansion valve. The refrigerator shall be equipped with an electrical cord and plug. The refrigerator controls shall feature 3 digit LED display, temperature monitoring, internal time clock, 72 hour data storage and display capability of Fahrenheit or Centigrade temperatures. The control shall have visual and audible alarm warnings for hi/lo cabinet temperature, evaporator coil sensor failure, clogged filter-clean condenser, discharge line sensor failure, power supply interruption and door open cycles and times. The refrigerator shall be furnished with a one year refrigeration service policy on a local level. The refrigerator shall be equipped with all standard equipment and shall otherwise be in accordance with the manufacturer's standard specifications. The specifications are based on Traulsen Model #RHT132WUT-HHS.

4.144 #128 Rack Ovens

Contractor Furnished - Contractor Installed

Each rack oven shall be a gas rotating oven which shall hold two single racks or one double rack in side load or end load configurations. The base of the oven shall measure overall approximately 72" wide x 62" deep x 99-1/2" high. Each oven shall have an integral Type 1, UL 710 Listed fully welded hood with removable grease filters, overhanging the front by 30-1/2". Oven shall have a single 10" diameter exhaust connection, exhausting 900 CFM at 0.6" static pressure. Oven shall have a factory installed airflow proving switch integrated with the burner system operation. Oven shall have stainless steel interior and exterior

construction with the door hinged on the right. Door shall be flush with the floor and oven shall have an adjustable floor design to allow easy access without a ramp. Oven shall have built-in rollers and levelers.

Oven shall have a 300,000 BTU/HR. in-shot burner system with a weldless heat exchanger consisting of 22 independent high temperature, corrosion resistant, stainless steel tubes. The in-shot burners shall have no moving parts. Oven shall also include a self-contained spherical cast steam system which shall convert one gallon of water into steam within 20 seconds at a temperature of 400 degrees or higher. Oven shall have a heavy duty rack lift with high temperature bearings and a clutch rotating system. Control panel shall have 99 programmable settings with auto on/off feature, 4 step bake/roast settings, auto vent and sleep mode. Oven shall include a diagnostic center with status indicator lights. Oven shall also be provided with optional manual back-up control. Specifications are based on Baxter Model #BXA2G ovens.

4.145 #129 Oven Racks

Contractor Furnished - Contractor Installed

Oven racks shall each be a single rack holding sheet pans and steam table pans for baking and roasting. Racks shall be provided by the oven manufacturer to ensure proper fit. Each rack shall have 13 sets of slides 4.7" on center. Each rack shall hold (26) 12" x 20" x 4" deep steam table pans, (26) 12" x 20" x 2-1/2" deep steam table pans or (13) 18" x 26" sheet pans. Racks shall be constructed of stainless steel with special laser cut shelves to create a more precise and sanitary fit for steam table pans. Each rack shall be 20.3" x 28.4" x 69.8" high. Racks shall have 4" swivel casters with lifetime lubricated wheel bearings, rated for 515 degrees F. and 250 pound capacity each. Each rack shall be shipped assembled and fully welded. Specifications based on Baxter Model #BDRSBFS-13W.

4.146 #130 Clean Utensil Table

Contractor Furnished - Contractor Installed

Clean utensil table shall be custom fabricated in the size, shape and arrangement indicated on the plan, measuring approximately 8'-0" long x 3'-6" wide x 2'-10" high to working level at the utensil washer, Item #50. The top shall be constructed of one piece 14 gauge stainless steel with top pitched to the utensil washer at the right end. The rear edge against the building wall shall be formed up integrally into a 12" high x 2" thick back splash. Right end of back splash shall be mitered into utensil washer as indicated on the plan. The right end of the table shall be formed down into the utensil washer and secured and sealed in a watertight manner. The front and left end edges shall be formed up into a 3" high x 1-1/2" wide square channel rim. Table shall be mounted on an open tube base with a full size stainless steel undershelf. Undershelf shall be for horizontal storage of the utensil washer racks and shall accommodate the racks. Clean utensil table shall be constructed in accordance with Part 2 of these specifications.

4.147 #131 to #151 Not Used

4.148 #152 Waste Cooking Oil Storage Tank

Contractor Furnished - Contractor Installed

Waste cooking oil tank shall have a capacity of 2,650 pounds/353 gallons and shall measure approximately 42" in diameter x 80" high. Tank shall be designed for outdoor use and shall have heavy gauge aluminum exterior,

immersion heater, level indicators with safety overflow protection, inlet on top, outlet with collection port on front in an accessible location and remote control panel with power indication. Unit shall be wired 120-60-1 phase. Remote control shall be mounted to the wall in the receiving area as shown on Detail #B1/QF504. Storage tank shall be by the same manufacturer as the waste cooking oil caddy, Item #153. Tank shall be installed in accordance with the manufacturer's recommendations. Specifications are based on Front Line International Model #4280-NA-020.

4.149 #153 Waste Cooking Oil Caddy
Contractor Furnished - Contractor Installed

Waste cooking oil caddy shall be used to transport oil from the fryers to the waste cooking oil storage tank, Item #152. Caddy shall have a capacity of 150 pounds/20 gallons and shall measure approximately 30" x 21" x 9-1/2" high to the top of the tank. Caddy shall have stainless steel construction, heavy duty casters with brakes on the front, crumb catcher basket, removable handle, lock in place safety cover, filter screen, quick disconnect fittings and high temperature hose. Caddy shall be wired 120-60-1 phase with power switch, break away power cord, 5 gallon per minute roller pump and a 1/2 HP motor. Quick connect oil hose station shall be mounted to the wall in the receiving area and 3/4" black iron pipe shall be extended to the storage tank as shown on Detail #B1/QF504. Caddy shall be by the same manufacturer as the waste cooking oil storage tank, Item #152. Caddy shall be installed in accordance with the manufacturer's recommendations. Specifications are based on Front Line International Model #20SS-NA.

4.150 #154 Work Table
Contractor Furnished - Contractor Installed

Work table shall be the size, shape and arrangement shown on drawing, measuring overall 72" long x 30" wide x 35-1/2" high to working level. The top shall be constructed of 14 gauge stainless steel with front and both ends formed down 2" square. The top shall be depressed 3/16" with a 3/4" wide rim on all exposed sides. The rear edge shall have a 10" high x 2" thick backsplash. Welded integrally into top at one end as shown on drawing shall be a sink insert measuring inside approximately 16" x 20" x 12" deep. Sink shall be fitted with a twist handle drain with overflow. A 14 gauge stainless steel tab shall be stud bolted to the bottom of the sink to support the drain handle. Mounted to top and centered behind sink shall be a deck mounted faucet with goose neck spout as specified in Section 2.6.1.3. Top shall be mounted to an open tube base with stainless steel legs and welded cross rails on rear and both ends. Each leg shall have a stainless steel flanged foot secured and sealed to the floor. Specifications are based on an Advance Tabco Model #TVKS-306 table with a Model #TA-11B sink.

4.151 #155 Can Crusher
Contractor Furnished - Contractor Installed

Can crusher shall be a counter top electric hydraulic unit wired 120-60-1 phase with cord and plug. Crusher shall be designed to accommodate #10 cans and other smaller sizes and shall crush up to ten #10 cans per minute. Unit shall have a stainless steel cabinet, crusher box and safety lid which must be closed for the unit to operate. Can crusher shall measure overall 30" long x 12" wide x 16" high. Crusher shall be mounted to the right end of the top of the work table, Item #154 and shall be positioned to overhang the recycling bins, Item #156. Specifications are based on an Edlund Model

#CH-5000.

4.152 #156 Recycling Bins
Government Furnished - Government Installed

Recycling bins shall be the same as Item #115.

-- End of Section --