

SECTION 11 40 00 – FOODSERVICE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All drawings, general, special and/or supplementary conditions, Division 01, specifications, and related documents apply to the work specified in this section.

1.2 SUMMARY OF THE WORK

- A. Project and Location-The project is:
Burton ISD Renovations
Burton, Texas
- B. Acceptance of the Working Surface: Contractor executing work over the work of another contractor shall notify the Architect of any unacceptable conditions. If no notification is made, then beginning any work constitutes contractor's acceptance of the prior work.
- C. Field Verification of Dimensions: Prior to procuring materials or executing any work, contractors must site verify all dimensions of the building and are responsible for the accuracy of them. Add-ons or supplements will not be accepted for discrepancies in drawings and in existing conditions or for work executed under this contract. If discrepancies are found, contractor is required to submit them to the Architect or Surcana FSD for directions prior to proceeding.
- D. Cutting and Patching: Excessive cutting is not allowed. Contractor is not permitted to cut ANY structural members without the written approval of the Architect. Contractor shall leave all chases and openings straight, true and of appropriate size as may be required for the installation of his as well as other contractors' work. After his work has been installed, he shall neatly fit around, close, repair, patch and point up to the satisfaction of the Architect.
- E. Coordination: The GC, contractors and subcontractors shall coordinate their work with all Adjoining work and fully cooperate with all trades to further the overall advancement of the work. Each trade to provide all other trades with reasonable time for completion of their work and the storage of their materials.
- F. Observation and Inspection: The Architect, Owner, Surcana FSD and/or their designee are to have acceptable and safe access to the site no matter the stage of the project to observe and/or inspect what they deem necessary.
- G. Permits and Inspections: Procure and coordinate ALL permits, licenses and inspections that are necessitated by the work following all laws, codes, regulations, and contract requirements.

1.3 SCOPE

- A. Scope to encompass the work specified, indicated, and deduced as part of Foodservice Equipment. If required, because of regional trade agreements and or restrictions, some parts of this work can be subcontracted to qualified contractors.
- B. General Contractor is responsible for Related Work specified in other Sections.

- C. Work consists of providing ALL necessary services, tools, equipment, material, and labor required for the installation as designated on the food service equipment plan and in specifications including but not limited to uncrating, erecting, setting in place, leveled, trimmed, caulked, anchored, sealed, and made ready for final connection by the appropriate Division contractors. If specifications and drawings differ in any manner or ANY discrepancies are found, bidders must seek clarification from Architect and or Surcana FSD prior to bid. Contractor is responsible for providing equipment and the Work so that equipment is fully operational as designed and intended.

1.4 RELATED WORK OF OTHER CONTRACTORS

A. General Construction by Contractor:

1. All floor assemblies including finishes, openings, depressions, sleeves, curbs, and bases.
2. All wall and/or partition assemblies including finishes, openings, recesses, sleeves, furring and backing.
3. All ceiling assemblies including finishes, openings, soffits, access panels, fire separation and sleeves.
4. All roof assemblies including finishes, openings, curbs, platforms, and dunnage.
5. All structural supports or grounds for hanging or fastening of food service equipment assemblies as may be described in this section.

B. Plumbing by Contractor:

1. Water, gas, and steam supply systems, as required.
2. Sanitary and grease laden drainage systems.
3. Final plumbing connections including mounting of drains, faucets, pre-rinses, hoses and from point of connection on equipment to building plumbing systems and interconnections between equipment components. Install all hoses from utility raceways to connection points on equipment.

C. Grease traps as required.

D. Indirect drain line runs from equipment items to nearest floor drain or floor sink as required.

E. Gas, water, and steam pressure reducing valves and all other fittings as required.

F. Gas shut off valve(s) as required for vent hood fire suppression system and gas regulators on Individual pieces of gas fired equipment in accordance with the manufacturer's recommendations are to be provided by the Kitchen Equipment Contractor and installed by the Contractor.

G. Kitchen equipment contractor to furnish faucets with nipples, elbows, supply lines and valve stops, drains and/or splash mounted vacuum breakers, etc. for each equipment item as specified. Items to be installed by the Contractor.

H. Indirect wastes shall be chrome plated and are to drip over and into floor drains. Where drains and/or supply lines run under equipment provide the proper support from the underside of the equipment to eliminate interference with cleaning and/or maintenance.

- I. H.V.A.C.
 - 1. Contractor to provide and install all necessary components as may be required for the exhaust/make- up air system(s) and condensate exhaust air system including but not limited to the fans (unless provided by the Kitchen Equipment Contractor), ducting, gas shut-off valve(s), curbs, penetrations, dampers, controls and/or switches unless otherwise specified herein.
 - 2. Contractor to provide and install as required rated chase(s) as well as other separations as may be required.
- J. Contractor to provide and install all heating, ventilating, and air conditioning systems except as otherwise specified in this section.
- K. Electrical by Contractor:
 - 1. All electrical distribution, lighting, and power systems except otherwise specified in this section.
 - 2. Final electrical connections and inter-connections including labor and materials from point of connection on equipment to building electrical systems and required interconnections between equipment components.
- L. All electrical materials including wire, conduit, over current protection, main switches, safety cut-outs, shunt-trip breakers, disconnect switches, lightning control devices, surge protectors, uninterruptible power units and controllers.
- M. Shunt-trip breakers and/or contactors and all conduits for shut down of electrically operated cooking equipment and/or ventilation equipment as required for vent hood fire suppression system.
- N. Empty conduit systems for refrigeration system, as specified and/or shown on food service drawings.
- O. Empty conduit system for point-of-sale system, as specified and /or shown on food service drawings.
- P. Empty conduit system for fire suppression system, as specified and/or shown on food service drawings.
- Q. Furnish and install switches and/or disconnects within equipment, contactors, combination Starters with fused disconnects, controls and similar items necessary for the safe and proper operation of the equipment and for compliance with all N.E.C.
- R. All switches, disconnects, and/or control devices shall be safely accessible.
- S. Kitchen Equipment Contractor to secure cords to the underside of the equipment on portable and/or movable equipment as to allow ease of maintenance or as required by the Owner.
- T. Install all electrical cord sets provided by the Kitchen Equipment Contractor as part of the foodservice equipment. Install all cord sets from utility raceways to their connection points on the equipment.

1.5 EQUIPMENT FURNISHED / INSTALLED BY OTHERS

- A. Acquire physical info and utility requirements of Owner-Furnished/Owner-Installed equipment. Coordinate requirements with the building utilities and rough-in drawings/provisions and incorporate details into submittal drawings. Same for ALL Vendor or Purveyor furnished equipment.

1.6 WORK INSTALLED BUT FURNISHED BY OTHERS

- A. Acquire and coordinate utility requirements of Owner Furnished/Contractor Installed equipment with the building utilities and rough-in drawings/provisions. Coordinate the delivery and installation of such equipment no later than 3 months prior to before equipment is required. Treat equipment receiving / installation as if it is being provided under this 11400 section.

1.7 RE-USED EXISTING EQUIPMENT

- A. Utility disconnection and re-connection: under Divisions 22 and 26.
- B. Disassembly, removal, transportation, and relocation: under this Section and scheduled with General Contractor. Owner's representative must be present, coordinate date / time with owner.
- C. Thoroughly clean inside and out prior to relocation.
- D. Review functional parts (e.g., doors, controls, heating elements, compressors, etc.) and submit report of required repairs and estimate of cost.
- E. Existing equipment not scheduled for reuse is to be carefully removed under this Section, at the Owner's direction.
- F. Removal or replacement of existing equipment is to be scheduled for times of least interruption and inconvenience to the foodservice operation. Submit proposed schedule of time frame, task sequence and operation for approval prior to starting work.

1.8 QUALITY ASSURANCE

- A. Equipment and installation of the work must comply with ALL applicable laws, statutes, building codes and regulations of public authorities/local jurisdictions. Equipment must meet individual organizational standards below and bear their labels as applicable. Contractor to furnish proof of listings with initial submittal.
 - 1. National Sanitation Foundation (all equipment).
 - 2. National Electrical Code (on applicable equipment).
 - 3. Underwriter's Laboratories (on applicable equipment).
 - 4. American Gas Association (on applicable equipment).
 - 5. National Fire Protection Association (on applicable equipment).
 - 6. American Disabilities Act (all equipment)
 - 7. Department of Energy (on applicable equipment).

8. Environmental Protection Agency (on applicable equipment).

B. If the project is outside of the US, equipment and the work must comply with any and all governing codes and regulations that may be required by the local Authority Having Jurisdiction.

1.9 ALTERNATES/SUBSTITUTIONS & APPROVED EQUALS

A. Specified items and brands are meant to be the Basis of Bid. Any other brands, including those which may be listed as "Alternates" or "Approved Equal," must conform to the specifications, size, accessories, etc. of the primary brand. Contractor to make any adjustments in space, utilities and construction as necessary for the alternate/substitutions to meet the original brand specs as designed at contractors own expense. Equipment in similar group or category to be same manufacturer brand.

B. Proposed Substitutions:

1. Submit no later than 10 business days before bid date.
2. Submit proposed substitutions with spec sheet and manufacturers drawings detailing any modifications necessary to conform with specified brand.

C. Substitutions with prior approval:

1. Submit on separate proposal form with each item's monetary additions or deletions and the required documentations called out in B-02 of 1.9. Provide all services necessary to make adjustments in space, systems, utilities etc. and all costs associated that will be incurred by acceptance of said substitution ALL at contractor's expense.
2. Owner reserves the right to accept or reject any or all substitution proposals before execution of Contract.

1.10 INTERPRETATION OF DOCUMENTS

A. Specifications and drawings have been prepared to form the basis for procurement, erection, start-up, and adjustment of all equipment in this contract. Plans and specifications are to be considered in conjunction with one another. When items and/or work are required by one but not by the other, contractor is to provide as though required by both. If specifications and drawings differ in any manner or ANY discrepancies are found, bidders must seek clarification from Architect and or Surcana FSD prior to bid. Contractor is responsible for providing equipment and the work so that equipment is fully operational as designed and intended.

B. If the drawings disagree in themselves, or the specifications with the drawings, the higher cost, better quality, and greater quantity of the work, items and or materials shall be completed without additional costs to the Owner.

C. In the course of bidding, contractors', suppliers' or vendors' questions relating to construction documents will be answered by an addendum.

D. Following Award:

1. Confirmation of Construction Document requirements will be provided by Clarification Bulletin.
2. Request for Information Bulletins submitted by Contractor are to include Contractor's proposed resolution.

1.11 WARRANTY

- A. All items on project to have a one-year parts and labor written warranty starting from the date of Substantial Completion. Wearable items such as door gaskets, light bulbs and or component replacements due to improper maintenance or cleaning are excluded.
- B. Refrigerated Equipment: Provide three-year parts and labor (excludes walk-in assemblies and systems).
- C. Compressors: Provide 5-year parts warranty
- D. Provide a list of local factory authorized warranty service agents with the corresponding equipment data for all items on project. Include all contact details required to setup a service call.

1.12 SUBMITTALS

A. General Requirements:

1. Submit shop drawings, samples and brochures simultaneously in one complete submittal.
2. Equipment List: Submit an itemized list of equipment to be furnished under this contract, to include manufacturer's name and model number, along with all necessary and/or required options and/or components, for each piece of equipment necessary.

B. Samples:

1. Provide all samples of materials for test purposes/ comparisons and approval. Samples used for testing shall not be used on the work without the written approval of Surcana FSD / Architect. Submit color/pattern selection samples of ALL solid surface finishes, polymer products, laminates, paint, stain, vinyl surfaces and tile for approval prior to use and or fabrication.
2. Samples may be retained by Surcana FSD, the Project Architect or the Owner as a matter of record without any additional compensation to the Contractors.
3. Owner to provide all samples as required to Kitchen equipment contractor to ensure proper sizing of dispensing equipment specified and or warewash and holding equipment as applicable (cups, glasses, pans, trays, dishware, etc.).

C. Brochures:

1. Provide two (2) hard copied complete brochures for review showing each piece of standard manufactured equipment, complete with all details and/or descriptions of the manufacturer's specifications. Contractors will return one (1) brochure (set) with comments noted for further action. Continue submitting until final approval from Surcana FSD is achieved. After approval provide (7) hard copies in a three-ring binder with such details and specifications clearly numbered with the item number as per the food service equipment plans.

2. Hard copy brochures are to be bound in booklet form in three ring binders delivered at the demonstration and start-up to include the following:
 - a. A separate data sheet for each component or item of equipment indicating item number, description, quantity, manufacturer, model number, finishes, modifications, options, and utility requirements.
 - b. Catalog specification sheet and / or manufacturer's specifications and drawings complete including accessories. Arrange booklets so those items are in numeric order in accord with the contract documents with each page numbered in relation to that item. Include with each specification sheet and/or drawing a copy of the warranty information, operations manual and service information. Also include a completed contractor's and the food service equipment contractor's guarantee and warranty.
 3. Provide (1) complete bound set of operator's manuals and maintenance instructions containing complete description, wiring diagrams, operating data and other information pertaining to the proper operation and up-keep for the specified items of mechanical equipment having motors or other moving parts. After approval provide (3) record copies in a three-ring binder clearly numbered with the item number as per the food service equipment plans. Include names, addresses and telephone numbers of authorized service agencies for all items with mechanical equipment as well as information of local rep.
- D. Shop, Rough-in, and/or Mechanical Connection Drawings:
1. Kitchen equipment contractor to provide (1) blueprint and (1) reproducible set of shop drawing prints for review and comments by Surcana FSD. The one (1) reproducible print with comments noted will be returned for correction. Continue resubmitting as noted above until final approval is achieved. Upon final approval submit prints as required per Architect's requirements and one (1) CADD thumb drive of approved prints for distribution.
 2. Kitchen equipment contractor to prepare rough-in drawings locating all equipment (new, existing, or as provided by owner) shown on the contract documents. The rough-in requirement drawing included in these documents are provided as an instrument of service and are not to be used for construction and/or reproductions. Provide (7) 1/4" scale drawings on sheets the same size as contract documents showing, with vertical and horizontal dimensions, the required rough ins (including sleeves and conduits) for electric, gas, water, steam, sanitary waste, refrigeration, ventilation, condensation drain lines, air and exhaust connection and wood backing for wall mounted fixtures and equipment. Show details, sections, and characteristics for slab depressions and/or other features and/or installation including data for all services in each area. Locations of equipment shall allow for traps, switches, and/or other final connection requirements. All drawings shall include floor plans showing equipment as per the contract documents, elevations, details, and sections.
 3. Provide complete plans with dimensions showing locations and elevations of all plumbing, electrical and mechanical rough ins each with their own respective sheets. Use same symbols, connection numbers, and dimensioning system as indicated in Contract Documents (scale 1/4"). All engineering requirements are to be updated as required to accommodate the provided equipment and or match the contract documents. Kitchen equipment contractor is responsible for the coordination of any MEP revisions to accommodate the provided and proposed equipment. The kitchen equipment contractor is responsible for any cost associated with equipment substitutions.
 4. Provide complete plans and details showing locations and elevations of all depressions, bases, curtain walls and hoods and any critical wall dimensions. Use same dimensioning system as indicated in Contract Documents (scale 1/4").
 5. Prior to fabrication, kitchen equipment contractor to submit fabrication shop drawings for

approval. Shop drawings showing plan and elevations to be 3/4" scale, sections shall be 1-1/2" scale covering all fabricated items. Drawings to show location of equipment to be coordinated with each item such as boosters mounted below dish table, disposers under sink compartments.

6. Fabrication details must identify all metal gauges, hardware, trim, electrical parts, special fitting and other components by manufacturer's name and model number.
7. Foodservice Submittal Documents are to be signed by the kitchen equipment contractor to indicate they have been reviewed and coordinated with submittals by electrical, plumbing, mechanical, millwork or other trades and meet all contract requirements. Foodservice Submittal Documents, which are not stamped and approved by the kitchen equipment contractor will be returned to as "NOT REVIEWED". The kitchen equipment contractor will be required to resubmit after review, as stated above.

E. Checking:

1. Checking of rough-in drawings, shop drawing, details, and equipment by Surcana FSD is for design concept only and does not relieve the kitchen equipment contractor or Contractor of responsibility for compliance with design drawings, details and specifications, verification of utilities with equipment requirements for conformity and location and verification of all dimensions of equipment, building conditions or reasonable adjustments due to deviations. Drawings shall be prepared on the Foodservice Equipment Contractor's sheets. Drawings of any part created by photograph, paste-up, or other methods using Surcana FSD and/or Architect's drawing(s) and / or details is a violation and will be returned for re-submittal. Kitchen equipment contractor will assume responsibility for the proper locations and sizing of sleeves, conduits, and depressions for the various equipment requirements. Kitchen equipment contractor is responsible for making multiple field inspections to verify the rough-in locations prior to the pouring of concrete, the closing of walls, etc. Kitchen equipment contractor shall compensate other trades for any relocation of rough-ins.

F. Distribution:

1. All prints are to be delivered in a mailing tube. After checking, supply the specified number of distribution prints for record purposes. All CADD drawings shall be on thumb drive with all drawings formatted as a *.dwg or *.dxf file.

1.13 SERVICE MANUAL

- A. Provide (3) complete bound set of operator's manuals and maintenance instructions containing complete description, wiring diagrams, operating data and other information pertaining to the proper operation and up-keep for the specified items. Number with the item number as per the food service equipment plans and include specification sheet and manufacturers shop drawings. Include names, addresses and telephone numbers of authorized service agencies for all items with mechanical equipment as well as information of local rep. If available, provide video recorded instructions explaining operation and maintenance.

1.14 VERIFICATION AND COORDINATION OF PROJECT / DATA

- A. Utilities Rough-in Drawings and field verifications to be completed within four weeks after approval to proceed and prior to concrete pour. Review contract drawings and submittal data for correctness and entirety and advise Architect of conflicts and suggested modifications.

Coordinate work with other subcontractors and verify the installed utility proportions and locations are accurate and acceptable.

- B. Review critical systems/components for application, performance and capacity and submit calculation worksheets with initial submission of brochure/rough-in drawings, with all proposed adjustments noted, including:
 - 1. Exhaust hood removal/supply air volume, velocity, static pressure, duct collar sizes, locations, exhaust hood fire suppression system and its components locations.
 - 2. Refrigeration Systems capacities/sizes, quantities, and refrigerant piping distances/sizes.
 - 3. Locations of Vacuum Breakers and floor troughs/trench drains.
 - 4. Wastewater conservation measures required by applicable guidelines/codes
 - 5. Gas, water and steam/condensate and chilled water line sizes and manifold configurations.
 - 6. Diameter and length of flexible connector lines for fixed movable gas appliances.
 - 7. Fabricated Equipment load center panels (individual and total amperage calculations and circuit balance).
 - 8. ADA compliance of workstations, service positions, walkways, etc.
- C. Ceiling suspended equipment or fixtures: verify and coordinate dimensions/location of support framing/hangers with General Contractor. All material and installation below 12'-0" above finished floor to be a part of Section 114000.
- D. Dimensional Liability: acquire accurate measurements for exact fit of equipment. Dimensions Indicated in contract documents are as accurate as can be determined at the time. Field verify all measurements and conditions at the site before fabrication or delivery of equipment. Inform the Architect of any variances from the dimensions shown.
- E. All equipment must be fabricated to allow delivery and installation thru finished corridors and openings. Clarify and understand site limitations for handling/moving/installing equipment and components within the building and coordinate with General Contractor.
- F. Clarify dimensions and layout of walk-in assemblies and dry storage areas to allow for specified shelving/dunnage sections. Advise Architect of any discrepancies between the contract documents and confirmed conditions.
- G. Review mobile equipment required to fit into or thru fixed equipment (dollies, pan racks, dispensers etc.) to ensure compatibility at time of initial shop drawing submittal. Stipulate any conflicts and with proposed solution or modifications.
- H. If necessary, relocate work as to coordinate associated items at no charge if no extra work is involved.

PART 2 - PRODUCTS

2.1 MATERIALS / COMPONENTS

- A. Stainless steel to be Type 304 with a #4 finish.
 - 1. Stainless steel seams/connections are to be TIG welded. The welds are to be ground smooth without deficiencies and polished to match finish of abutting material.
 - 2. Stainless steel grain direction of horizontal stainless-steel surfaces (including backsplashes) to run "East West ".

- B. Sound Deadening-Applied NSF gray latex sound deadener for large brushed/rolled sections and Tacky Tape butyl sealant between tops, channels and between all framing members of all fabricated equipment.
- C. Laminates/Solid Surfaces/Tile: color, pattern, style, and thickness selected by Architect.
- D. ID plates, labels and tags: All to be made of phenolic material and engraved with item function ect. Secure with stainless screws or plastic cement.
- E. Casters
 - 1. Fabricated fixtures with "Open Base" construction: Jarvis and Jarvis Model No. 5-405-113P-NSF swivel casters with grease seals on forks and wheels; Zerk fitting in swivel; two casters: Model No. E-75 Vertilock brakes. All casters: B-7" rolling bumpers with stainless steel top discs.
- F. Cutting Boards: ¾" thick Read Products, Inc. cutting board, size as indicated.

2.2 PLUMBING / MECHANICAL REQUIREMENTS

- A. Plumbing Fittings and Components- Items provided in this section are:

NOTE: FITTINGS AND COMPONENTS EXPRESSED IN ITEMS 1, 2 AND 3 ARE PROVIDED LOOSE FOR INSTALLATION BY DIVISION 22 AND OR 23

- 1. Control valves, equipment pressure regulators for gas, steam, water and vacuum breakers as needed on foodservice equipment (provide in chrome-plated when exposed).
- 2. ALL faucets drains without connected overflows (unless specified differently) , 11400 fill faucets and hose assemblies specified / shown on drawings.
- 3. Properly sized commercial water hammer arrestors for all foodservice equipment with solenoid-operated water valves.
- 4. Extensions of indirect waste fittings to open-sight floor sink or floor drains from sinks, under bar equipment, and food holding components of serving counters with drains (food wells, cold pans, frost tops ect that do not have condensate evaporators) provided and installed by Division 22.
- 5. Drains: paint with aluminum paint when exposed, use type "K" copper when concealed with piping brackets and supports beneath/within fabricated equipment.
- 6. Closed Base Bodies: removable 18 gauge stainless steel closure panel at plumbing penetrations, under top.
- 7. Control valves on Open Base fixtures: mounted on 14 gauge stainless steel panel with 3½" setback from counter top edge/rim to face of control handle.
- 8. Fill hose/faucet at support pedestals or Closed Base Body: installed in a 15" x 18" x 5" deep recessed mounting panel. Panel bottom: sloped on a 60° angle, with 3/8" stainless steel rod hanger-bracket for hose.
- 9. Water filtration system:
 - a. Everpure filters for ALL water connected foodservice equipment sized by manufacturer unless specified otherwise.
- B. Gas-Heated Equipment Fittings and Components: provided under this section:

1. Fixed Equipment: Dormont brand KIT2S double swivel with restraining cable gas hose kit sized per equipment requirements. Approved equal: T&S. Gas valve sized per equipment requirement.
- C. Final Plumbing Connections Provisions.
1. Fabricated equipment containing components, fittings and/or devices indicated on Foodservice connections drawings to be connected to the building systems: each component, fitting or group thereof pre-piped to a utility compartment for final connection by Division 22. Refer to drawings for capacities.
 2. Field-assembled equipment (e.g., prefabricated walk-in refrigerator/freezers, exhaust hoods, warewash machines, convection ovens, etc.): plumbing components completely interconnected under this Section for final connection arrangements indicated on Utility Connection Drawings.
 3. All plumbing final connection points of equipment shall be tagged, indicating:
 - a. Item number.
 - b. Name of devices or components.
 - c. Type of utility (water, gas, steam, drain, chilled water).
- D. Ducts and Vents.
1. Exhaust hoods which are furred-in to ceiling: 2" high duct collar for final connection to duct system.
 2. Warewash machines equipped with integral vent cowls or extended hoods: furnished with 18 gauge stainless steel seamless duct risers to 6" above finish ceiling for final connection. The duct: trimmed at ceiling with 16 gauge stainless steel angle flange with all corners welded.

2.3 FOODSERVICE EQUIPMENT REFRIGERATION SYSTEMS

- A. Installed with all the components and fluids needed for the proper operation of the system.
1. Self-contained and manufacturer installed systems: set to proper operating temperature that is required to meet ALL codes.
- B. Walk-In Refrigeration System Components:
1. Unit coolers: specified quantity and model, ceiling hung by 1/2" o.d. nylon bolts with stainless steel washers and nuts. Insert hanger bolts through plastic sleeve and seal penetration airtight.
 2. Unit cooler drain fittings: positioned as indicated on drawings. Install cast tee fitting on drain-pan outlet with union, clean out plug and extend 1" copper drain-line through wall panel to air gap fitting or floor drain.
 3. Slope drain-line 1/2" per foot, trap at exterior of assembly and turndown into drain. Manifold drain lines of adjacent compartments wherever possible.
 4. Install plastic sleeve through compartment wall, seal around drain-line and install stainless steel escutcheon with setscrew.
 5. Heat exchanger: on all unit coolers; in proper size.
 6. Electric drain-line heater cable: on all unit coolers operating below 36 degrees F, installed from drain-line fitting to wall penetration. Heater cables: minimum rating of 30 watts/ lineal foot, 120 volt. Wrap drain line with maximum of 2" loop spacing and wire to unit cooler for continuous operation.
 7. One (1) evap fan door activation switch to shut off evap coils when door is opened.

C. Refrigeration System Installation:

1. Refrigerant lines: Type "L" hard copper tubing. Fittings: wrought copper or brass designed for use with high temperature solder. Piping joints: made with silver solder (Sil-Fos). Piping: properly suspended from and anchored to the structure with adjustable hangers 6' o.c. maximum. Suction lines: sized to have maximum pressure drop of two pounds in medium temperature systems; one pound in low temperature systems. Liquid lines: sized to give maximum pressure to prevent trapping of oil. Rigid insulation: 1" thick Armstrong Accotherm (1-1/2" thick at low-temp) with factory applied fire retardant jacket and vapor barrier on all suction lines.
2. Cover exterior refrigeration lines with aluminum jacketing. Seal any openings where lines pass thru exterior walls with expanding foam. Paint silver to match aluminum jacketing.

D. Evacuation and Charging:

1. After completion of the pressure test, the system should be evacuated using an a method that meets all codes/requirements. Connections for evacuation to meet manufacturer's recommendations.
2. Charging subsequent to the initial charge, which is contained in the condensing unit: given through the charging valve in the high side passing all the liquid refrigerant through a charging dehydrator. All charging lines and gauges: purged of air prior to connection with system. After the system is fully charged: started and placed in full operation.

E. Refrigerant Leak Detection Systems

1. In the City of Houston and any other jurisdiction with similar requirements, when the quantity of refrigerant in the system dictates the necessity for a refrigerant leak detection system, this system shall become the responsibility of the foodservice contractor.

2.4 PLUMBING TRIM

- A. Faucets: furnished for all sinks or equipment requiring open water supply.
- B. Fill Faucets: furnished for appliances requiring open water supply. Unless otherwise noted in Part 4 – Equipment Schedule, provide T&S B-0167 faucet assembly complete with flex hose, spray head, valves and ect.
1. Drain Fittings: furnished for all sinks or equipment requiring removal of liquids. Install specified chrome-plated or stainless-steel fittings in die-stamped openings with washers and locknuts. Solder may be used as a sealer but shall not be applied to the top surface of the drain fittings.

2.5 ELECTRICAL REQUIREMENTS

- A. All electrical systems, components and accessories within the work of this Section: certified to be in accordance with NEC 70 and ALL National and local codes.

B. Electrical Fittings and Components: provided under this section as follows. Coordinate foodservice equipment loads, voltage and phase with building system and confirm any existing or Owner furnished/Owner Installed equipment requirements.

C. Cord and Caps.

1. Coordinate all Foodservice Equipment cord/caps with related receptacles.
2. All 120 volt "plug-in" equipment shall have Type SO or SJO cord and plug with ground wire fastened to frame/body of item.
3. Cord lengths for fixed equipment: adjusted to eliminate loose-hanging excess.
4. All non-fixed plug-in "buy-out" equipment: Hubbell configuration, ratings as required.
5. All mobile electrical support equipment (heated cabinets, dish carts, etc.) and counter appliances mounted on mobile stands (mixers, food cutters, toasters, coffee makers, microwave ovens, etc.): 8'-0" cord length with cord-hanger strap secured to rear of equipment or mobile stand.

D. Switches and Controls.

1. Each motor-driven appliance or electrically heated unit: equipped with control switch or starter per Underwriters' Laboratories, Inc. with low-voltage and overload protection.
2. Equipment which is not provided with built-in circuit breakers or fused terminal block and is indicated on Utility Connections Drawings to be directly connected to the building electrical system: a NEMA 4 stainless steel disconnect switch furnished and installed by Division 26.
3. All remote manual starters, disconnect switches, magnetic contactors or starters and push-button stations: NEMA Type 4 enclosure; NEMA Type 1 enclosure only when installed in a Closed Base Body.

E. Heating Elements.

1. Electrically heated equipment: thermostatic controls.
2. Water heating equipment: equipped with positive low-water shut-off.

F. Receptacles and Switches.

1. Receptacles installed in vertical panels of support pedestals or Closed Base Bodies: installed in 12" x 8½" x 3" deep recessed mounting panel sloped on 60° angle and turned up to top of opening.
2. Pre-wire receptacles in closed base fixtures to a junction box installed within 6" from bottom of utility or compressor compartments.
3. Receptacles mounted on Open Base fixtures: installed on 12" x 10½" x 4½" deep 14 gauge stainless steel panel with returned ends and sloping recess. Secure panel to underframe of fixture top.
4. Pre-wire receptacles on open base fixtures to a junction box secured to a leg or mounted on underside of lower shelf. Vertical runs of wiring: made in rigid conduit or within the tubular leg (VERIFY which method prior to construction).
5. Receptacles installed in/on fabricated equipment: Hubbell, Inc. assemblies horizontally mounted in a metal box with stainless steel cover plate.
6. Switches installed in/on fabricated equipment: Hubbell, Inc. with metal box and stainless-steel cover plate. Switches: pre-wired to the controlled device and to a junction box installed within 6" from bottom of utility or compressor compartment. All refrigeration system switches: installed within the compressor compartment near the door opening.

7. Load centers installed in/on fabricated equipment to have all fixture components pre-wired to load center with balanced phase loading. Load center: ready for final connection by Division 26 and flush-mounted within utility compartment rear panel, set back 8" from access door. All breaker/device information typewritten on circuit schedule in load center door (number corresponding breaker/device) with enclosed schematic wiring diagram of fixture components.
- G. Light Fixtures.
1. Light fixtures with lamps installed in/on fabricated or field-assembled equipment: pre-wired to a junction box for final connection (continuous-run fixtures when indicated).
 2. Display Lights: install LED light fixtures full-length of Display Stand and Serving Shelf with stud bolts and pre-wire through support posts to an apron-mounted switch.
 3. Heat Lamps: installed to underside of serving shelf assemblies. When multiple 24" heat lamps are specified, provide maximum length heat lamp chassis. Install all switches remote from lamps.
 4. Walk-In Assembly Light Fixtures: electrically connected through the hub fitting located on the top of the fixture. All horizontal conduit: above ceiling panels. Install plastic sleeve through ceiling panels for electrical conduit. Seal sleeved penetrations airtight at both sides of panel. Lights to be LED style provided by Kitchen Equipment Contractor for installation by electrical contractor.
- H. Final Electrical Connection Provisions.
1. Fabricated equipment containing electrically operated components or fittings indicated on Utility Connections Drawings: direct connected, with each component, fitting or group pre-wired to a junction box for final connection by Division 26. Refer to drawings for circuit loading.
 2. Fabricated equipment containing electrically operated components and/or devices indicated: circuit-breaker load center with each component or device pre-wired to a separate circuit breaker for balanced phase loading and single final connection by Division 26.
 3. Field-assembled equipment (e.g., prefabricated cold storage assemblies, exhaust hoods, warewash machines, etc.) shall have electrical components completely interconnected in this Section for final connection arrangements as indicated on Utility Connections Drawings by Division 26.
 4. Pre-wire the following groups of cold storage assembly electrical devices to a top-mounted Junction box for final connection by Division 26 per compartment grouping (unless otherwise indicated).
 - a. Light fixtures and switches; heated pressure-relief vent.
 - b. Door/jamb heaters.
 - c. Evaporator fans, defrost elements and drain line heaters.
 5. All electrical final connection points of equipment shall be tagged, indicating:
 - a. Item number.
 - b. Name of devices on circuit.
 - c. Total electrical load.
 - d. Voltage and phase.
- I. Lamps: in all Foodservice Equipment containing light fixtures. Refrigerator or heated cabinets: To be LED style and shatter proof or enclosed in suitable enclosure to eliminate possibility of broken glass coming into contact with food or surfaces around the food zone.

2.6 CUSTOM - FABRICATED / ASSEMBLED UNITS

- A. All pieces fabricated under this section are to be built by the same manufacturer.
- B. Mechanical or electrical operating components or products integrated into a fabricated fixture: Provide the specified ventilation and service access required or recommended by the manufacturer. The service access panel(s) size and placement is to permit easy lubrication, adjustment or replacement of all moving parts and is to be indicated on fabrication shop drawings.

2.7 COUNTER / TABLE TOPS

- A. 14 gauge stainless steel; all free edges turned down 2" with $\frac{3}{4}$ " tight hem at bottom. Free corners: rounded on $\frac{3}{4}$ " radius.
- B. Marine edges: turned up $\frac{1}{2}$ " on 45° angle and turned down 2" with $\frac{3}{4}$ " tight hem at bottom.
- C. Provide stainless steel insulated raised platform in front of hot wells.
- D. Tops abutting high fixtures or walls: cove up specified height and slope back $1\frac{1}{2}$ " at top on 45° angle; $2\frac{1}{2}$ " slope where piping occurs. Turn down 1" at rear of splash and close ends to bottom of top turn- down. Secure splash turndown to wall with 4" long 14 gauge stainless steel "Z" clip anchored to wall, 36" o.c.
- E. Freestanding tables and all serving counter splash-risers: turned back on 90° angle with 1" turndown at rear.
- F. Understructure materials/bracing of tops to use a $1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $\frac{1}{8}$ " galvanized steel angle welded frame with cross bracing at every 20" spacing maximum. Use 12 gauge stainless steel pads where leg gusset welds to frame and paint frame with rust resistant gray semi-gloss enamel. Secure top to frame with $\frac{1}{4}$ " studs welded every 8" maximum with chrome-plated washer, lockwasher and capnut. Studs: such length that cap nuts can be made-up tight, bringing top down snugly on angle frame eliminating all vibrations or "oil-canning".
- G. Tops: $1\frac{1}{2}$ " overhang at free sides of underframe or Closed Base Body.
- H. Mockett Model No. SG5-26D satin chrome grommet assembly or integrally welded stainless steel flange or inverted gusset where service utilities or support posts penetrate or adjacent to tops, ground and polished to match top.
- I. Extend underbracing members to wall, turn down 6" and anchor to wall when specified to be mounted on leg/bracket assembly.
- J. All openings in tops: $\frac{3}{16}$ " high raised die-formed edges.
- K. All top openings for pans or inserts: 20 gauge stainless steel, watertight liners, $8\frac{1}{2}$ " deep, secured to underside of counter top.
- L. All "built-in" and "drop-in" counter equipment/appliances: with framing members at perimeter of opening.

2.8 DRAWERS

- A. Liners: Component Hardware # S81-2020-C (20" x 20"), easily removable with drawer in fully extended position.
- B. Drawer Frame: 16 gauge stainless steel flanged out at top. Weld the frame to double-paneled 16 gauge stainless steel drawer front with full-length recessed pull at top with closed ends.
- C. Channel-formed horizontal pull: ¾" turndown at front and ends with ½" tight hem. Front edge of pull: flush with face of drawer. Recess behind pull: sloped up on 60° angle, terminating 1" below bottom edge of pull.
- D. Mount drawer frame on Component Hardware # S52-2022 slides, with solid nylon rollers, full-depth of fixture. Secure slides to body or brackets to eliminate lateral movement in extended position. Refrigerator drawers: Component Hardware Model No. S52-2024 stainless steel slides.
- E. Drawer enclosure in an Open Base Fixture: 18 gauge stainless steel flanged out at top for attachment to underside of table top. Lower edge of enclosure is flanged in toward open bottom. Mount drawer slides to enclosure and brace as required. Face of enclosure is to be same length and height of drawer face. Provide ¾" deep offset in front of enclosure and 2½" from underside of tabletop for flush-fitting appearance. Drawer enclosure on freestanding fixture: full depth of table framing.
- F. Drawer enclosure in a Closed Base Fixture: completely partitioned from adjoining area. Drawer front: flush-fitting with face of body.
- G. Cash Drawer: integral stainless-steel body, 3" deep.

2.9 HOT WELLS

- A. If well model and manufacturer are not specified within detail of that item number, use Wells #BMW-206RTDU. Remote mount well controls to single stainless panel to house it and controls for sneeze guard lights and heat. Provide detail of construction and mounting location prior to construction or KEC will be responsible for any associated cost to modify to Surcana's approval.

2.10 SINKS

- A. 14 gauge stainless steel; all interior corners (horizontal/vertical) coved on ¾" radius with 1½" wide double-walled partitions with flat tops between compartments.
- B. Continuous exterior panels of multiple-compartment sinks: 14 gauge stainless steel filler panel welded, ground and polished between compartments.
- C. Sinks with dimension larger than 20" x 20" (no overflow): score and slope sink bottom ½" to die-stamped opening fitted with Krowne # 22-507 rotary drain with tailpiece. 14 gauge stainless steel bracket: welded to sink bottom for drain stem with 1½" handle clearance.

- D. Sinks with overflow: score and slope sink bottom $\frac{1}{2}$ " to die-stamped opening fitted with Krowne # 22- 507 rotary drain with connected overflow and tailpiece. 14 gauge stainless steel bracket: welded to sink bottom for drain stem with $1\frac{1}{2}$ " handle clearance.
- E. Where sinks are installed in fixture with Closed Base Body, provide a Krowne # 22-507 rotary drain with connected overflow and tailpiece. (Sinks with dimension larger than 20" x 20" in Closed Base Body will not have overflow fitting.) 14 gauge stainless steel bracket: welded to sink bottom.
- F. When single-hole deck-mounted faucets are specified, install overflow fitting into side wall of sink compartment and provide ell-fitting in connecting tubing.
- G. Flush Covers when specified: $\frac{1}{2}$ " thick Read Products/ Richlite cutting board with all corners and edges eased and two 1" finger holes. Support clips: $\frac{1}{4}$ " stainless steel rod 2" long, formed at 45° with two $\frac{3}{4}$ " leg ends ($\frac{1}{4}$ " long threaded ends). Insert rod-clips through tight-clearance holes in sink, seal watertight and secure with stainless steel acorn-nuts or tack-weld at exterior of sink wall. Set support clips $\frac{1}{2}$ " below top. Provide 14 gauge stainless steel channel or angle support frame to store covers when not in use. Cover holder: adjacent to sink compartment, below countertop or under drawer assembly.

2.11 TRAYSLIDES

- A. Trayslides: Must meet all ADA requirements.

2.12 DISHTABLES

- A. Soiled/clean dishtable: 14 gauge stainless steel; free edges coved up 3" with $1\frac{1}{2}$ " diameter rolled rim and bullnosed corners.
- B. Edge of dishtables next to high fixtures or walls: coved up 10" and sloped back $1\frac{1}{2}$ " on 45° angle; $2\frac{1}{2}$ " slope where piping occurs. Turn down 1" at rear of splash and secure to wall with 6" long 14 gauge stainless steel "Z" clips anchored to wall, @ 36" o.c.
- C. Exposed rear splash: 16 gauge stainless steel finish panel from top of splash to bottom edge of rolled rim with welded vertical joint at end. Secure panel with concealed attachment and install bracing 24" o.c.
- D. Cove all interior corners (horizontal/vertical) on $\frac{3}{4}$ " radius and slope tables $1/8$ " per foot to sinks, scuppers or warewash machines, maintaining level crown/splash.
- E. Brace dishtables with 1" x 4" 12 gauge stainless steel channels down centerline of top and between each pair of legs, with closed ends. Bracing: secured to underside of dishtable with $\frac{1}{4}$ " studs welded 6" o.c. maximum, with chrome-plated washer, lockwasher and cap nut. Studs: such length that the cap nuts can be made up tight, bringing the dishtable down on the channel-members, eliminating all vibration and "oil-canning."
- F. Integrally-welded stainless steel flange or inverted gusset where service utilities or support posts penetrate or abut tops; ground and polished to match top.
- G. Hose Bibb: T&S #B-0674-BSTP; mounted on 12 gauge stainless steel flange or inverted gusset bracket with $3/8$ " stainless steel rod hose hanger.

2.13 DISH AND TRAY DEPOSIT ASSEMBLY

- A. 14 gauge stainless steel deposit shelf to be sized as indicated on drawings. Extend shelf through opening, flush with public side of partition. Turn shelf down 1" at front with $\frac{3}{4}$ " return at bottom. Shelf: 1" square turndown at rear long side, integral with conveyor slider pan, tray accumulator or dishtable. Extend rear/end splash to align with head of deposit station opening. Cookson CD Series roll down door to fit opening. Use fire rated version when required and coordinate installation with splashes, jambs etc. or dishtable when adjacent.
- B. 18 gauge stainless steel window frame with perimeter flange channel formed 1" x $\frac{3}{4}$ " at both sides of the wall. Weld all corners of frame and install with concealed attachment. Align one jamb of frame with end of conveyor slider pan or dishtable when adjacent.
- C. Cookson CD Series roll down door to fit opening. Use fire rated version when required and coordinate installation with splashes, jambs ect or dishtable when adjacent.

2.14 DOORS

- A. 18 gauge x 1" stainless steel double pan-formed welded construction, insulated with 1" thick polyurethane boards. Seal perimeter joint of pans. Offset lower horizontal framing member of Closed Base Body to align flush access door with bottom of Body.
- B. Channel-formed full-length horizontal recessed pull: $\frac{3}{4}$ " turndown at front and ends with $\frac{1}{2}$ " tight hem. Front edge of pull: flush with face of door. Recess behind pull: sloped up on 60° angle and terminated 1" below bottom edge of pull.
- C. Door Hardware:
 - 1. Two Component Hardware # M75-1002 stainless steel hinges (notch door/jamb at hinge location) with CH #35-2000 and SS door lock.
- D. Louvered opening: cut-out opening size as indicated, turn in 1" and weld. All corners: ground and polished.
 - 1. Full-height 18 gauge stainless steel louver with 1" vanes at 45°, $\frac{1}{2}$ " spacing. Perimeter channel- formed frame: 1½" x 1". 45° x 1" x $\frac{1}{2}$ " x opening width plus $\frac{1}{2}$ " 18 gauge stainless steel louver.
 - 2. Tack weld tab of louver flange to back panel of door.
- E. Sliding Doors: fabricate same as Paragraph "A."
 - 1. Aluminum Sliding Door Track: Component Hardware Model No. B57-0000 Series, length as required, and secure to angle frame at top of underside.
 - 2. Front/rear door sheaves: stainless steel $\frac{3}{4}$ " side mounted door hangers; two (2) required per door.
 - 3. Recessed Vertical Pull at Upper Corner of Door: Component Hardware Model No. P63-1012.
 - 4. By-Passing Door Guides secured to bottom shelf: Component Hardware Model No. B62-1093.
 - 5. Door Stop at bottom edge of door: Component Hardware Model No. B60-1086.

- F. Offset lower horizontal framing member of Closed Base Body/utility compressor compartment to align door flush with bottom of Body.

2.15 CLOSED BASE BODIES

- A. Frame Construction to be fully welded 1½" x 1½" x 1/8" galvanized steel angle with cross bracing and 16ga stainless steel panels. Provide layout of frame detail to Surcana FSD for approval prior to construction.
- B. Vertical and horizontal channel members at shelf interior or drawer enclosures, such as corners and center mullions: closed and sealed.
- C. Closed Base Bodies set on finished masonry platforms: closed and caulked at underside of equipment overhang and bolted to platform. Body overhang of platform: 1" at free ends 2" at front and exposed rear sides.
- D. Closed Base Bodies not set on platform to receive Kason# 1752 6" legs spaced at 4'-0" maximum intervals.

2.16 COMPRESSOR COMPARTMENTS

- A. Same material as Closed Base Bodies with back and end partitions; omit bottoms only.
- B. 10 gauge steel slide out support: channel frame on full extension slides with 125 lb. minimum capacity secured to fixture frame with anti-vibration mountings for maximum sound deadening. Closed Base Body on solid platform: front-to-back slide out support channels set 4" above bottom for air circulation.
- C. Access Door: 18 gauge stainless steel double-pan type with channel formed horizontal recessed pull full length of top (similar profile as Garco Model No. R-1060) with closed ends. Channel-formed horizontal pull: ¾" turndown at front and face of door. Recess behind pull slopes up on 60° angle, terminating 1" below bottom edge of pull. Offset lower horizontal framing member of Closed Base Body to align flush access door with bottom of body. Door hardware: two Component Hardware Model No. M75-1002 stainless steel hinges (notch door/jamb at hinge locations) and Component Hardware Model No. 35-2000 concealed magnetic catch.
- D. Louvered Access Doors: design to be submitted via drawing for approval prior to construction.

2.17 UTILITY COMPARTMENTS

- A. Closed Base Bodies or Pedestal Supports: fitted with utility compartments wherever piping or wiring is required in/on the fixture.
- B. Same material as Closed Base Bodies with full-height back and end partitions. Omit bottoms except at hose-reel locations.

- C. Access Doors: 18 gauge stainless steel double-pan type with channel formed horizontal recessed pull full-length of top with closed ends. Channel-formed horizontal pull: $\frac{3}{4}$ " turn down at front of door, recess behind pull slopes up on 60° angle, terminating 1" below bottom edge of pull. Offset the lower horizontal framing member of the Closed Base Fixture to permit flush alignment of door with face and bottom edge of body. Door hardware: two Component Hardware Model No. M75-1002 stainless steel hinges (notch door/jamb at hinge locations) and one Component Hardware Model No. 35-2000 concealed magnetic catch.
- D. No shelves of Closed Base Fixtures are to be penetrated.

2.18 POT RACK

- A. Pot Rack to be fully welded stainless steel 2"x $\frac{1}{4}$ " flat bar with #4 finish shaped as drawn. 1 $\frac{5}{8}$ " stainless post risers as drawn and installed at 7'6" above finished floor with Component Hardware # J77-4401 hooks every 6".

2.19 CASHIER / SERVING COUNTERS

- A. Exterior Body Panels when specified: $\frac{3}{4}$ " thick marine grade hardwood plywood with plastic laminate or solid polymer in Architect's selection of color/pattern at all exposed surfaces; backing sheet where concealed.
- B. Position, size and finish horizontal or vertical reveal as directed by Architect.
- C. Secure panels to counter body framing in concealed manner. Install removable panels with "Z" clips overlapping body framing members.
- D. Hinged doors in exterior body panel(s): Grass Model No. 1200VZ or 1200VZ8 self-closing hinges. Three required per door; Grass Model No. G/HRZ base plate at each hinge; Ives Model No. TM820 concealed push latch at each door. Confirm Model No. and provide samples with submittal.

2.20 OPEN BASE STRUCTURES

- A. 1-5/8" o.d. x 16 gauge seamless stainless steel tubing legs beveled at bottom. 1 $\frac{1}{4}$ " o.d. crossrails fully-welded (360° smooth and polished) to legs at 10" aff, o.c.
- B. Top of Leg: inserted in Component Hardware Model No. A20-0206 gusset fully welded to table frame or sink bottom.
- C. Bullet Foot: Component Hardware Model No. A10-0851-C
- D. Table Bases: maximum leg spacing of 6'-0" o.c.; dishtable and utensil wash counter bases at 5'-0" o.c.

2.21 UNDERSHELVES

- A. Open Base Structures: 16 gauge stainless steel turned down 1½" with tight hem at bottom. Notch all corners to fit tubular legs and weld from underside to completely fill gap, grind and polish. Cove up 2" at rear or ends adjacent to wall, columns, refrigerators, etc. The turn up at freestanding fixtures is to be hemmed tight to bottom of turndown. Brace undershelf with 1" x 4" 14 gauge stainless steel channel at longitudinal centerline and at each intermediate pair of legs.
- B. Closed Base Fixtures: 16 gauge stainless steel turned down 1½" at front. Front edge of bottom shelf: turned back and sealed to finished masonry platform or boxed for leg application. Center shelf has ¾" tight hem.
 - 1. Shelves: turn up square at ends (coved up at rear only) to the shelf above or countertop flanged out for attachment with no open spaces at interior.
 - 2. All shelf partitions at exposed ends of cabinet bodies or interiors: free of exposed framing members.
 - 3. Reinforce shelves with full-length 1" x 4" x 14 gauge stainless steel closed hat channel.
 - 4. Unless otherwise noted, all closed base undershelves are to be 22" deep, clear.
 - 5. Fully weld smooth and polish, the vertical seam of shelf turndown/turn up with face of body partition.
 - 6. Seal the vertical seam of square turn-in at exposed interior of open shelf sections.

2.22 ANCHOR PLATES / WOOD GROUNDS

- A. Behind finish surface wherever building wall, partitions or ceiling construction will not accommodate direct attachment of equipment such as overshelves, wall cabinets, hose reels, utensil racks, exhaust hoods, display cases, etc. Material and installation by General Contractor. Location and coordination with trades by Section 11 40 00.
- B. Anchor Plates: not less than 12" x 12" x ¼" thick steel, secured to the structure above or behind the finished surface, positioned at attachment points.
- C. Wood Grounds: length required by fixture, component or device, 24" wide x ¾" thick plywood secured to partition system prior to gypsum board installation.
- D. Above ceiling supports structural shapes (4" x 8.0 lb. channel) suspended from structure. Maximum height 15'-0" aff. size: width of equipment x length of equipment plus 6'-0". Crossbracing at 6'-0" on center maximum.

2.23 OVERSHELVES

- A. 16 gauge stainless steel with free edges turned down 1" with ½" tight hem at bottom. ¾" radius at free corners.
- B. Turn up 2" at walls or abutting pieces with horizontal coved corner at rear. Round front corners of turn up on ¾" radius.
- C. Where shelf width exceeds 12" width, reinforce with ½" x 4" 14 gauge stainless steel closed hat channel full-length of shelf.
- D. Wall-Mounted Shelves: 16 gauge stainless steel brackets 48" o.c. maximum, set in 6" from ends.

- E. Freestanding Shelves: where splash is required at free overselves, turn up square 2" at ends, cove up at rear and hem tight to lower edge of front turndown. Weld exposed corners.
 - 1. Freestanding overselves: 16 gauge stainless steel cantilevered brackets at rear of table; double-cantilevered brackets at center of table. Posts for cantilevered overselves are 1-5/8" o.d. x 16 gauge stainless steel secured to underframe, 4'-0" o.c. Ends of shelves: secured to adjacent wall/fixture or mounted on 1 1/4" diameter stainless steel posts.
 - 2. Freestanding overselves not on cantilevered brackets: 1 1/4" o.d. x 16 gauge stainless steel posts, each pair at 4'-0" o.c., maximum.
- F. Glass/Cup Rack Overshelf at Dishtables: 14 gauge stainless steel with 1 1/2" deep "V" trough at free long sides with 1" tight hem at inside of trough. Provide a 1/2" marine edge at free ends 4" splash at wall. Suspend shelf at 18" above dishtable surface on posts/brackets anchored to dishtable frame/wall at rear; 1" o.d. stainless steel tubing supports from structure above ceiling at front edge, 60" o.c./each end.
 - 1. Install at both ends, 1/2" stainless steel drain-tube (connecting both V-troughs) extended to dishtable surface through splash turnback.
 - 2. Rack-rest: horizontal full-length 1-5/8" o.d. stainless steel tubing supported at 10" o.c. above shelf (8" o.c. for double service shelf) by 1 1/4" o.d. stainless steel tubing with closed ends. Support tubing: welded, ground and polished, spaced 60" o.c.
 - 3. Rack-rest supports to wall: 4" x 4" x 10 gauge stainless steel flange plates welded to support tubing. Anchor flanged plates to blocking ground with non-corrosive bolts.

2.24 WALL PANELS

- A. Wall Panels: 18 gauge stainless steel, double pan-formed 1/2" thick with internal stiffener members. Fill with USDA approved thermal insulation, full height and width of panels, attach to interior with mastic. Maximum allowable temperature at rear side of panel: 120°F.
 - 1. Height of panels as required: top of tile base to underside of hood, top of tile base to top cap of stub wall or top of splash to underside of hood.
 - 2. Level and square lower edge and sides.
 - 3. Butt joint all panels.

2.25 HIGHLIGHTING

- A. Polish the following vertical surfaces to a No. 8 finish:
 - 1. Stainless steel table and counter top turndowns and backsplash returns.
 - 2. Dishtable and utensil wash counter rolled rims (full radius).
 - 3. Overshelf turndowns.
 - 4. Door and drawer horizontal pulls.
 - 5. Conveyor and dish/tray deposit station turndowns/frame.

2.26 SHOP / FIELD JOINTS

- A. Field joints: least possible number, used only when equipment size must be limited for access into building or interior space.
- B. Stainless steel tops (including edges and splashes): fully welded, ground and polished to match adjacent surface.
- C. Vertical field joints of fixture backsplashes that are inaccessible from the back: terminate 1" above the horizontal coved corner. The remaining height of field joint: hairline butt joint with offset draw-angle behind. All horizontal/vertical draw-joints: located and noted on shop drawings. Hairline butt joint: 1½" x 1½" x 1/8" steel angles welded to back/underside of countertop/shelf. Offset angle beyond joining metal edge ½" (min.) to provide flat backing surface for joint with angle of other joining metal edge, set for ½" space between vertical legs of angles. Bolt sections together with 5/16" machine bolts, lock washers, acorn head cap nuts, set 3" o.c.
- D. Closed Base Bodies: draw-type with hairline seam fully field-welded.
- E. Millwork: plastic laminated material joints shall be doweled, glued and draw-bolted with fasteners.
- F. Solid Polymer: surfaces drawn tight, filled, sanded and finished to match adjacent surface.
- G. Hairline butt joint: 1½" X 1½" X 1/8" steel angles welded to back/underside of countertop/shelf. Offset angle beyond beyond joining metal edge, set for ½" space between vertical legs of angles. Bolt sections together with 5/16" machine bolts, lock washers, acorn head cap nuts, set 3" on center.

2.27 DRAIN TROUGHS

- A. Liners: 14 gauge stainless steel in sizes as indicated. Interior of liners to be 6" deep with all interior corners (horizontal/vertical) coved on ¾" radius; sloped and scored 1" to integrally welded Component Hardware Model No. D34-Y011 basket drain assemblies @ 48" o.c., fitted with 6" long welded tailpiece. Stainless steel safety chain connected to basket strainer assembly and top of liner wall.
- B. Liners: 1" wide perimeter shoulder at the top, turned up flush with finished floor, tight-hemmed back down to the shoulder level and flanged out 2" for attachment to the slab.
- C. Underside of sloping portion of liner: 2" long "Z" clips.
- D. Grating: Removable (without tools) stainless steel 1½" x 3/16" bars spaced every 7/16" with cross bar spacing at 4" on center and full perimeter frame.

2.28 VENTILATION/EXHAUST HOOD

- A. Hoods: size/shape as indicated on drawings. All hoods to be built and installed to meet ALL local and national codes. Division 22 to install condensate drains as required from hood drain to floor sink. Paint drain line in silver color where exposed.

- B. Hang with ½" steel hanger rods provided by the kitchen equipment contractor but anchored to building structure by GC. Hang rods at maximum of 4' spacing. Kitchen equipment contractor to hang and fully trim out hood with stainless trim/closure panels sized to cover from top of hood to a minimum of 6" above finished ceiling.

2.29 EXHAUST HOOD FIRE EXTINGUISHING SYSTEM (FUSIBLE-LINK / LIQUID CHEMICAL)

- A. System: installed in accordance with manufacturer's recommendations and applicable codes or standards. Submit Installation certification Form to Architect.
- B. Automatic Chemical System: in each filtered exhaust hood/duct assembly and also surface Protection to above/in all equipment required by NFPA Bulletin No. 96 and local Fire Marshall's regulations. Refer to Contract Drawings for quantity of exhaust fan units serving single or multiple exhaust hoods and coordinate with hood/fan controls.
- C. Install chemical cylinders as indicated on drawings and install piping to exhaust hoods in totally concealed manner. Set cylinders and cabinets at underside of finished ceiling unless noted otherwise. Exposed piping/fittings within cylinder location and exhaust hood: chrome-plated or sleeved with stainless steel tubing. Exposed pipe threads in/above food zone not acceptable. Submit schematic diagram of installation and confirm critical distances from cylinders to nozzles.
- D. System Components: Ansul R-102 system assemblies, in system increments required by dimensions and configuration of equipment and hoods.
- E. Remote Manual Release: located in path of egress from protected exhaust hood area. Division 26 to provide 4" Octagon box in wall (at 48" aff) with EMT conduit stub to 6" above finished ceiling.
 - 1. Each System: Ansul Automan cylinder control assembly with electric switch.
 - 2. Fusible links installed in duct collar of filtered hoods/ducts.
- F. Fusible links located directly above each cooking device required by Code, in quantity required by length of protected appliance.
- G. Ansul K-Guard series fire extinguisher located at each exhaust hood. Install at 36" aff to bottom Of extinguisher.
- H. Required quantity and sizes of mechanically operated gas valves.

2.30 PREFABRICATED COLD STORAGE ASSEMBLIES

- A. Sectional Assemblies: size/shape indicated on drawings; 8'-6" aff unless otherwise specified. Door locations/size: exactly as shown.
- B. Panel Insulation to be Foamed In Place urethane. Panels to meet ALL City of Houston requirements including listings, monitoring systems, leak detectors when required and flame spread. Panels must be NSF listed.

- C. Wherever compartment dimension exceeds clear-span ability of ceiling panels, provide I-beam support on exterior of ceiling or spline-hangers. Install ½" diameter steel rods through beam/hangers and secure to structure above. Beams or posts within compartments are not acceptable.
- D. Reinforce prefabricated wall panels to rigid support the door assemblies. All door jambs: Furnished with replaceable full-perimeter thermostatically controlled heater cable. Install 2" x 4" 16 gauge stainless steel hat-channel full-width of jamb with 1/8" stainless steel removable flush sill, secured with stainless steel screws and sealed watertight to channel.
- E. Floorless Assemblies:
 - 01. 6 mil polyethylene sheets in slab recess with all joints lapped 6 inches and sealed to form a watertight seal.
 - 02. Level and square prefabricated perimeter and partition wall panels, anchored to slab recess. Protect exposed surface of panels.
 - 03. Two layers of 2" thick rigid polyurethane board insulation with staggered joints, set in mastic.
 - 04. 15# felt slip sheet over insulation with 6" lapped joints flashed up the height of finished floor base.
 - 05. Concrete flooring and tile over insulation by Divisions 03/09.
- F. Intelligent controller with temperature monitor/alarm with sensor and probe-cord length required to extend from exterior front of assembly to a mounting position of the sensor within evaporators return airstream and Panic-alarm Switch installed in each compartment at 72 aff. Interconnect Hubbell Pressswitch to EJS Monitor.
- G. Provide cove base at interior and exterior of panels that matches panel finish that it is being installed up to.
- H. Kason 1809 LED fixtures, one (1) per 64 square feet of assembly.
- I. Light Fixtures: wired to interior and exterior companion 3-way Hubbell Pressswitch per compartment, mounted in "FS" boxes with Hypalon covers and pilot lights. Compartments with multiple entrances: 4-way switches.
- J. Penetrations of Panels: sealed with silicone foam, full depth of panel. Trim excess flush.
- K. 12" x 2" engraved phenolic-plastic compartment identification sign in Architect's selection of color with 1" letters, mounted below respective alarm and thermometer.
- L. Install closure panels and/or trim strips to building walls and ceiling with concealed attachment. Closure material: same as wall panels unless noted otherwise.
- M. Compartment Entrance Doors: 36" x 78" nominal clearance unless otherwise noted.
 - 01. Mount hinged doors on three polished chrome plated or stainless-steel cam-lift hinges.
 - 02. Swing doors as indicated on drawings.
 - 03. Defrost heater: thermostatically controlled and replaceable at full perimeter of all doors, except when using clear Lexan doors (in addition to door jambs). Defrost heaters to be wired for continuous service.

- 04. 42" high x door length 16 gauge stainless steel kick plates at front and rear of all hinged doors.
 - 05. 12" x 2" engraved phenolic plastic compartment identification sign in Architect's color selection with 1" letters, mounted above door window.
 - 06. 14" x 24" glass view window with heater and molded non-metallic inner and outer frame. Heater to be wired for continuous service.
 - 07. Padlock/key provisions in door latch with interior safety release.
 - 08. Heated pressure relief ports in freezers to be wired for continuous service.
- N. Provide refrigeration calculations and refrigeration alarm to meet local City Health Code if required.
- O. Assembly to be installed with no gaps and considered "airtight". Vertical panels to have no more than 1/16" plumb variance on inside or outside. Condensation leaking in between and around panels is not acceptable.

2.31 COLD STORAGE REFRIGERATION SYSTEMS

- A. Unit Coolers: specified quantity and model, ceiling-hung by 1/2" o.d. nylon bolts with stainless steel washers and nuts. Insert hanger bolts through plastic sleeve and seal penetration airtight.
- 01. Unit cooler drain fittings: positioned as indicated on drawings. Installation of cast tee-fittings on drainpan outlet with union and cleanout plug and extension of 1" Type K copper drain line through wall panel to airgap fitting or floor drain under this Section.
 - 02. Slope drain line 1/2" per foot, trap at exterior of assembly and turn down into drain. Manifold drain lines of adjacent compartments wherever possible.
 - 03. Install drain line plastic sleeve through compartment wall, seal around drain line and Install stainless steel escutcheon with setscrews.
 - 04. Electric drain line heater cable on all unit coolers operating below 36°F., installed from coil drain line fitting to wall penetration under this Section. Heater cables: minimum rating of 15 watts/lineal foot, 208 volts, single phase. Wrap drain line with maximum 2" loop spacing and interwire to unit cooler for continuous operation.
 - 05. Mounted, pre-piped and pre-wired evaporator components:
 - a. Sporlan thermostatic expansion valve with external equalizer.
 - b. Shut-off valve at evaporator suction and liquid lines.
 - c. Sporlan "Catch-All" refrigerant filter/dehydrator on liquid line.
 - d. Adjustable thermostat with remote bulb positioned in return airstream of evaporator.
 - e. Electrical disconnect switch in NEMA 4 enclosure.
- B. Refrigerant System Installation.
- 01. Refrigerant Lines; Type "L" hard copper tubing. Fittings: wrought copper or brass designed for use with high temperature solder. Piping joints: made with silver solder (Sil-Fos). Piping: properly suspended from and anchored to the structure with adjustable hangers 6' o.c. maximum. Suction lines: sized to have maximum pressure drop of two pounds in medium temperature systems; one pound in low temperature system. Liquid lines: sized to give maximum pressure to prevent trapping of oil. Insulation on all suction lines: Insulation 3/4" thick at medium temp 1" thick at low-temp. Refrigerant lines in PVC or EMT conduit: sealed at both ends with silicone RTV foam. Exterior Refrigerant Lines to be wrapped by refrigeration system installer in self fastening jacket of Type 3003-H14 aluminum alloy 0.016-inch thick. Provide aluminum strapping and seals for applying

aluminum jacket and covers according to manufacturer's recommendations to provide completely weather-tight covering.

C. Evacuation and Charging.

01. After completion of the pressure test, the system shall be evacuated using an approved auxiliary vacuum pump. Connections for evacuation: in accordance with manufacturer's recommendations.
02. Charging subsequent to the initial charge which is contained in the condensing unit (Refrigerant type to meet all current national and local codes and be the most efficient option available by said manufacturer): given through the charging valve in the high side passing all the liquid refrigerant through a charging dehydrator. All charging lines and gauges: purged of air prior to connection with system. Refrigerant: unused and shall be delivered in clean containers. After the system is fully charged: start and place in full operation.

PART 3 - EXECUTION

3.1 DELIVERY AND INSTALLATION

- A. Supervision: provide a competent foreman or supervisor who shall remain on the job during the entire installation.
- B. Delivery: coordinate with progress of construction and Owner's operation schedules. Unless otherwise instructed and documented by Owner or General Contractor, the following procedures apply:
 1. Field-Assembled Fixed Equipment integrated into the structure (e.g., cold storage assemblies, exhaust hoods, drain trench/grate assemblies, conveyor systems, ceiling-mounted utensil racks, etc.) are to be sent to the jobsite when directed by the General Contractor and installed/protected accordingly.
 2. All other Fixed Equipment: delivered after completion of work on adjacent finished ceilings, lighting, finished floor and wall systems, including painting.
 3. Major Movable Equipment: delivered when possible to inventory in secured area for interim jobsite storage or, if secured area is not available, when fixed equipment installation/clean-up has been completed.
 4. Minor appliances and loose items (e.g., pans, covers, flatware containers, etc.) delivered only when Owner is prepared to receive and inventory such items.
- C. Installation: performed by manufacturer of custom fabricated fixtures.
 1. Assemble, square, level and make ready all items for the final utility connections.
 2. Cut neatly around obstructions to provide sanitary conditions.
 3. Where gaps of 1/4" or less occur adjacent to or between equipment, insert rope backing and smoothly applied construction sealant silicone mastic (white color). Mask both sides of gap for neat application of sealant and remove excess. If space exceeds 1/4", neatly install 18 gauge stainless steel trim molding of proper shape with concealed attachment. Use epoxy cement or "Z" clips wherever possible to secure stainless steel trim. Exposed edges or corners of trim: eased and smooth.
 4. Refrigeration coil drain line runs to indirect drain connection greater than 2" from face of wall or panel: either of the following field procedures.

- a. Trench the floor and provide 6" wide x 2" deep 16 gauge stainless steel sloping (-1" to -2") trough from face of cooler/freezer wall to body of floor sink/floor drain. Trough: turned up 4" at wall; 3/4" flange with 1/2" turndown at both long sides. Set trough in waterproof mastic and seal 1" o.d. drain tube penetration into floor sink/floor drain at -2 1/2" bff. Patch the floor to match adjacent material/surface.
- b. Provide 12" x 6" x 2" deep 16 gauge stainless steel condensate pan mounted to cooler/freezer wall at 6" aff clear. Trench the floor and install 1" o.d. drain line from bottom of pan to body of floor sink/drain. Slope drain line 1/4" per foot and seal all connections watertight. Patch the floor to match adjacent material/surface.

D. Protection of Work:

1. Fabricated fixtures: fiberboard or plywood taped to tops and exposed body panels/components.
2. Manufactured Equipment: fiberboard or plywood taped as required by equipment shape and installation-access requirements.
3. Prohibited use of equipment: tool and materials storage, workbench, scaffold, stacking area, etc.
4. Damaged Equipment: immediately documented and submitted to Owner with Contractor's recommendation of action for repair or replacement and its impact on the Project Schedule and Contract Amount, if any.

3.2 CLEAN AND ADJUST

- A. Clean up and remove from the job site, all debris resulting from this Work as the installation progresses.
- B. Thoroughly clean and polish interior/exterior of all Foodservice Equipment, prior to demonstration and final observation, ready for Owner's use.
- C. Lubricate and adjust drawer slides, hinges, casters.
- D. Adjust pressure regulating valves, timed-delay relays, thermostatic controls, temperature sensors, exhaust hood grilles, etc.
- E. Clean or replace faucet aerators, line strainers.
- F. Touch-up damage to painted finishes.
- G. Start up and check operation of all refrigeration systems for at least 72 hours prior to acceptance.

3.3 EQUIPMENT START-UP/DEMONSTRATION

- A. Final inspection will be made when the contractor will certify that he has completed his work; made a thorough review of the installation/operation of each item in the contract and found it to be in compliance with the construction documents.
- B. Provide the Owner or Foodservice Operators with a thorough operational demonstration of all equipment and furnish instructions for general and specific care and maintenance. Coordinate and schedule selected items of equipment and attendees with Owner at least two weeks in advance of demonstration periods.

3.4 FINAL OBSERVATION

- A. Final observation will be made when the Contractor will certify that he has completed his work, made a thorough review of the installation/operation of each item in the contract and found it to be in compliance with the Construction Documents.
- B. Repetitive final observations (more than two) and all costs associated there to which may be incurred due to the Contractor's failure to comply with the requirements of this Article will be invoiced to this Contractor on a time and expense basis.

PART 4 - EQUIPMENT SCHEDULE

4.1 REGULARLY MANUFACTURED EQUIPMENT/COMPONENTS:

- A. Standard finishes and accessories unless specifically deleted or superseded by the Contract Documents.
- B. AutoQuotes short form spec that is listed below in equipment schedule for some items are for reference example only and not to be used as base for bid. Kitchen Equipment Contractor is responsible for verifying correct quantities, finishes, brands and options by following the 11400 Spec, drawings and specific notes as well as sections 1.1 thru 4.4 of the front end of this contract document.

4.2 FABRICATED AND FIELD-ASSEMBLED EQUIPMENT:

- A. Arrangement and configuration as shown on Plans, Elevations and Detail Drawings.

4.3 REFER TO DRAWINGS:

- A. For unit quantities and electrical or mechanical provisions required, including manufacturer's optional voltages, wattages, burner capacities, etc.

4.4 REFER TO PART 2 – PRODUCTS:

- A. For accessories, fittings, requirements and procedures related to the listed buy-out and fabricated equipment.

4.5 FOODSERVICE EQUIPMENT: MAIN KITCHEN

ITEM NO.3	WALK-IN REFRIGERATION RACK-COOLER	QUANTITY 1
Manufacturer:	Refrigeration Design Technologies	
Model:	ZS Series	
Size and Shape:	Refer to drawings	
Utilities:	Refer to drawings	
Alternate:	Coldzone	
01.	Cooler to be sized for +35 degrees.	
02.	Unit mounted on 36"H galvanized angle iron frame to be anchored to concrete pad.	

03. Unit to have all SS housing and be anchored to concrete pad.
04. All exposed piping to be insulated and aluminum wrapped.
05. Single Point Electrical Connection NEMA 4XS/S disconnect.
06. EcoSmart Evaporator
07. Unit to connect to owner's backup generator.

Specific Notes:

Refer to drawings for specific mounting location. Installation of refrigeration lines and conduit must be coordinated with appropriate trades and GC to seal any building penetrations from installation of lines. Insulate and heat all drain lines.

ITEM NO.10 WALK-IN ASSEMBLY-COOLER QUANTITY 1

Manufacturer: American Panel
Model: ---
Size and Shape: Refer to drawings
Utilities: None
Alternate: Thermokool

01. Foamed in place urethane panels 4" thick
02. 4" FIP factory floor to be recessed in 8 ½" pit, 9'2"H overall
03. Exposed and unexposed exterior to be stucco aluminum finish
04. Interior ceiling to be smooth white aluminum finish & stucco aluminum for walls
05. Three (3) hinges per door with door stop and foot treadle
06. Doors to be stucco aluminum finish with 3'H Diamond Tread Kick plate on interior and exterior.
07. Diamond tread plate 3'H AFF along any exposed exterior walls.
08. One (1) Kason 1809 LED fixture for every 64sqft of compartment.
09. Heated viewport 14"X24" on all doors with flush style thresholds.
10. Electrical to be pre-wired through ceiling with no exposed conduit inside box.
11. Provide 20ga panel matched closure panels above walk-in to extend above finished ceiling.
12. Provide 20ga S/S trim to any abutting walls.
13. Clear Vu bi-parting strip door per each walk-in door
14. Backing in door panel for strip door mounting.
15. LED temp display with alarm, panic button and 4.5" SS dial thermometer per door.
16. Edwards 340A-N5-120VAC alarm bell and rocker style light switch
17. Monitoring system to remotely alert owner of out of range temps and door ajar
18. Handle with keyed lock

Specific Notes:

Evaporators to be mounted 18" from panel wall and temp sensors adjacent to them and NOT behind. Install P trap coming out of evaporator. Kitchen Contractor to field verify all dimensions and site constraints before ordering. Kitchen floor to continue smoothly into walk-in assembly at same level. Allow for tile and grout.

ITEM NO.12 WALK-IN SHELIVING QUANTITY 1

Manufacturer: Metro
Model: MetroMax 'Q'
Size and Shape: Refer to drawings
Utilities: None

Alternate: Cambro Elements

01. Each shelving unit to have four (4) tiers with four (4) post and removable vented mats.
02. Provide four (4) 74" posts per unit.
03. Verify sizes, widths and lengths per drawings.
04. Quantity of one (1) to equal one (1) Lot consisting of all shelving shown in the walk-in assembly.

Specific Notes:

Field verify sizes and quantities. Provide shelving layout submittal to be approved prior to ordering.

ITEM NO.13 DUNNAGE RACK QUANTITY 2

Manufacturer: Metro
Model: Bowtie Series
Size and Shape: Refer to drawings
Utilities: None
Alternate: Cambro

01. All polymer slotted dunnage sized per drawing.
02. 1500 lbs minimum weight capacity.
03. Include two (2) bowtie connectors per rack.

Specific Notes:

Field verify sizes and quantities. Provide layout submittal to be approved prior to ordering.

ITEM NO.15 AIR SCREEN QUANTITY 2

Manufacturer: Mars
Model: STD-2 Series
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Berner

01. STD-2 Series unheated air door sized to fit kitchen doors, black finish.
02. Plunger type remote mounted door switch.
03. Verify all mounting clearances to door before installing.
04. Verify finish/color with owner prior to ordering.

Specific Notes:

Electrical contractor to provide and install flex conduit to j-box of air curtain and neatly secure it to the building. Provide door switch to G.C. for installation by electrical contractor.

ITEM NO.16 DRY STORAGE SHELVING QUANTITY 1

Manufacturer: Metro
Model: MetroMax Q
Size and Shape: Refer to drawings
Utilities: None
Alternate: Cambro Elements

01. Each shelving unit to have five (5) tiers with four (4) post and removable vented mats.
02. Provide four (4) 86" posts per unit.
03. Verify sizes, widths, and lengths per drawings.
04. Quantity of one (1) to equal one (1) Lot consisting of all shelving shown in the dry storage area.

Specific Notes:

Field verify sizes and quantities. Provide shelving layout submittal to be approved prior to ordering.

ITEM NO.17	CAN RACK	QUANTITY 1
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Manufacturer: EXISTING, RE-USE
Model:
Size and Shape: Refer to drawings
Utilities: None
Alternate:

ITEM NO.18	CLOTHES WASHER	QUANTITY 1
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Manufacturer: OWNER FURNISHED
Model: ----
Size and Shape: Refer to drawings
Utilities: Refer to drawings

ITEM NO.19	CLOTHES DRYER	QUANTITY 1
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Manufacturer: OWNER FURNISHED
Model: ----
Size and Shape: Refer to drawings
Utilities: Refer to drawings

ITEM NO.21	CHEMICAL SHELVING	QUANTITY 1
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Manufacturer: Metro
Model: Max 4
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Cambro Premium

01. Each shelving unit to have five (5) tiers with four (4) post and removable solid mats.
02. Provide four (4) 86" posts per unit.
03. Verify sizes, widths and lengths per drawings.
04. When shelving is placed over janitor sink, provide Metro Smartwall w/Metroseal finish three (3) tier wall mount shelving or equivalent.
05. Verify mounting height and spacing prior to installation.

Specific Notes:

Field verify sizes and quantities

ITEM NO.22	JANITOR SINK	QUANTITY 1
	Manufacturer: BY PLUMBER Model: ---- Size and Shape: Refer to drawings Utilities: Refer to drawings	
ITEM NO.23	MOP / BROOM HOLDER	QUANTITY 1
	Manufacturer: U-Line Model: H-2841 Size and Shape: Refer to drawings Utilities: Refer to drawings	
	01. Mop Hanger, 24" stainless steel 02. If quantity more than (1) butt end to end 03. Secure to wall	
ITEM NO.24	HAND SINK	QUANTITY 5
	Manufacturer: BY PLUMBER Model: ---- Size and Shape: Refer to drawings Utilities: Refer to drawings	
ITEM NO.26	CORNER GUARDS	QUANTITY 1 LOT
	Manufacturer: Custom Fabricated Model: --- Size and Shape: Refer to drawings Utilities: none	
	01. 304 series 16ga S/S corner guards 4"X 4" with #4 finish located on all outside corners inside kitchen. 60"H with radius to match wall profile. 02. One (1) to equal One (1) Lot	
ITEM NO.28	SS WALL CAP	QUANTITY 2
	Manufacturer: Custom Fabricated Model: --- Size and Shape: Refer to drawings Utilities: none	
	01. 304 series 16ga S/S wall cap 02. 2" Turn down on free edges and coved turn up at wall full height to ceiling 03. Neatly caulk and seal around cap with clear silicone	
ITEM NO.100	ICE MACHINE W/BIN	QUANTITY 1
	Manufacturer: Manitowoc Model: RNP0320A/D-420 Size and Shape: Refer to drawing	

Utilities: Refer to drawing
Alternate: Hoshizaki

01. One (1) filtration system with one (1) pre-filter
02. One (1) Nugget Style ice maker model no. RNP0320A.
03. One (1) ice bin model no. D-420.
04. Stainless steel legs with flange feet
05. K00463 Ice Scoop

Specific Notes:

Filtration system to be easily accessible for service and mounted to abutting wall. Supply line to filtration system to be plumbed in copper. Supply line from filter to ice maker to be a flexible line that provides enough length to pull ice maker away from wall 48" without disconnecting. Final connections to be made by plumbing contractor. Attach water filter overflow tube to rear of ice maker/bin and route to floor sink.

ITEM NO.106 TWO COMP PREP SINK W/DISPOSER QUANTITY 1

Manufacturer: Custom Fabricated
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. 304 series S/S 14ga top with ½" Marine edge and 16ga undershelves as drawn.
02. Edges to be turned down 2" at free sides with 10"H splash at abutting walls.
03. Omit rear rail at sink bowls and at disposer when shown.
04. One (1) T&S model # B-0291, splash mount faucet, 18" swing nozzle
05. Two (2) Krowne 22-507 twist waste valve drains
06. Provide One (1) T&S model #B-0133-cr-b08sk pre-rinse
07. Provide S/S 16ga welded bracket to secure drain handles and S/S 14ga mounting plate for disposer control.
08. Two (2) 24"x26"x15" D 14ga sink bowls
09. S/S 1 5/8" Upright post to extend thru backsplash with a 12" D 16ga perforated overshell mounted at 18" above work surface. Post to continue vertically then turn out 12" D at 7' AFF. Weld 2" x ¼" S/S flat bar across post and provide Advance Tabco model TA-86 S/S double sided pot hooks every 6".
10. Install disposer and control panel as drawn with fully welded sink cone.
11. Two (2) "Richlite" ½" thick removable sink covers with 1" finger hole left and right installed at each sink. Weld S/S ¼" round bar set 5/8" below work surface at all four corners to support sink covers. Provide S/S channel support storage holder for sink covers at right or left end of counter.
12. Provide raised platform as drawn and mount one (1) Edlund model no. S-11.
13. Provide S/S adjustable flanged feet for front legs and S/S adjustable bullet feet for all others. Anchor flanged feet to floor after leveling.

Specific Notes:

When disposer is shown, provide notch in backsplash to accommodate vacuum breaker.
 When overshell is shown above disposer with pre-rinse, provide cutout in shelf to accommodate pre-rinse. If back is exposed, provide 18ga S/S rear panel from top of backsplash to overshell.

ITEM NO.107	DISPOSER	QUANTITY 2
	Manufacturer: Master Disposer Model: C-3-L Size and Shape: Refer to drawings Utilities: Refer to drawings Alternate: Red Goat	
	01. Disposer C Series 3HP 02. 208v/60hz/3ph 03. Model C-BC18 Bowl Cone Assembly 04. Model RAC2-KP RAC2 Disposer Control Panel 05. Two (2) Model 10-5-701 Water Swirl Inlet Valves per disposer 06. Install disposer into table as shown on drawings.	
ITEM NO.108	WORKTABLE	QUANTITY 1
	Manufacturer: Custom Fabricated Model: --- Size and Shape: Refer to drawings Utilities: Refer to drawings	
	01. 304 series S/S 14ga top and 16ga undershelf as drawn with edges turned down 2" 02. Provide and install one (1) S/S drawer assembly with S/S pan insert, slides and lock per table 03. 8"H x 1"D 14ga SS Rear Splash with closed ends, mount and seal to wall 04. SS Adjustable bullet feet	
ITEM NO.110	WORKTABLE W/ OVERSHELF	QUANTITY 1
	Manufacturer: Custom Fabricated Model: --- Size and Shape: Refer to drawings Utilities: Refer to drawings	
	01. 304 series S/S 14ga top and 16ga undershelf as drawn with edges turned down 2" 02. Provide and install two (2) S/S drawer assemblies with S/S pan insert, slides and lock per table 03. 8"H x 1"D 14ga SS Rear Splash with closed ends, mount and seal to wall 04. SS Adjustable bullet feet 05. 12"D 16ga SS overshelf post mounted through splash	
ITEM NO.113	MOBILE WORKTABLE	QUANTITY 3
	Manufacturer: Custom Fabricated Model: --- Size and Shape: Refer to drawings Utilities: Refer to drawings	
	01. 304 series S/S 14ga top and 16ga undershelf as drawn with edges turned down 2" 02. Provide and install one (1) S/S drawer assembly with S/S pan insert, slides and lock per table	

03. Set of four (4) 5" S/S bodied casters with polyurethane treads two (2) swivel and two (2) Swivel with brake

Specific Notes:

When worktable is next to conveyor oven-Recess one (1) of the table tops from front edge to accept 1/2" thick HDPE cutting board 24"x24" with stainless pin indexes at rear. Cutting board to be flush to stainless top. HDPE cutting board to be provided and installed by KEC. Tables to be height matched to conveyor belts.

ITEM NO.113.1 MOBILE WORKTABLE QUANTITY 1

Manufacturer: Custom Fabricated
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

****OPTIONAL / FUTURE ITEM****

01. 304 series S/S 14ga top and 16ga undershelf as drawn with edges turned down 2"
02. Provide and install one (1) S/S drawer assembly with S/S pan insert, slides and lock per table
03. Set of four (4) 5" S/S bodied casters with polyurethane treads two (2) swivel and two (2) Swivel with brake

Specific Notes:

Optional / Future Items to be priced in a separate quote. When worktable is next to conveyor oven-Recess one (1) of the table tops from front edge to accept 1/2" thick HDPE cutting board 24"x24" with stainless pin indexes at rear. Cutting board to be flush to stainless top. HDPE cutting board to be provided and installed by KEC. Tables to be height matched to conveyor belts.

ITEM NO.114 20 QT. MIXER W/STAND QUANTITY 1

Manufacturer: Globe
Model: SP20
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Hobart

01. 20 Qt. Planetary Mixer on Advance Tabco MX-SS-242 stand
02. SS bowl, dough hook, beater and whip

ITEM NO.115 SLICER W/STAND QUANTITY 1

Manufacturer: Globe
Model: G12A
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Hobart

01. Automatic slicer with 12" knife on Advance Tabco MT-MS-303 stand with TA-95
02. M500A Food Fence

ITEM NO.116 UTILITY CART SS QUANTITY 1

Manufacturer: Lakeside
Model: 544
Size and Shape: Refer to drawings
Utilities: None
Alternate: Caddy

01. Stainless Steel 3 shelf cart
02. Four (4) casters two (2) with brakes and perimeter bumpers

ITEM NO.117 UTILITY CART POLYMER QUANTITY 2

Manufacturer: Metro
Model: 544
Size and Shape: Refer to drawings
Utilities: None
Alternate: Cambro

01. Polymer 3 shelf deep ledge cart
02. Four (4) casters two (2)

ITEM NO.121 BAKER'S TABLE W/BINS QUANTITY 1

Manufacturer: Custom Fabricated
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. 304 series S/S 14ga top as drawn with marine edge and 8"H rear splash
02. Provide three (3) Cambro IBS20 mobile ingredient bins
03. 3 Tier SS drawer assembly in enclosed cabinet base as drawn
04. S/S 1 5/8" Upright post to extend thru backsplash with a 12" D 16ga overshef mounted at 18" above work surface. Post to continue vertically then turn out 12" D at 7' AFF. Weld 2" x 1/4" S/S flat bar across post and provide Advance Tabco model TA-86 S/S double sided pot hooks every 6".

ITEM NO.124 MOBILE HEATED CABINET QUANTITY 1

Manufacturer: Metro
Model: C549-ASDS-UA
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Carter Hoffman

01. Insulated cabinet with SS door and interior.
02. Top mount controls and analog thermometer
03. Dutch solid doors
04. Capacity of (16) 18"x26" or (32) 12"x20" pans on 1 1/2" adjustable slides
05. 5" Casters (2 with brakes)

ITEM NO.126 PAN RACK QUANTITY 2

Manufacturer: Cres Cor
Model: 207-UA-12AD
Size and Shape: Refer to drawings
Utilities: None
Alternate: New Age, Lakeside

01. Aluminum welded construction.
02. 1405-000 Perimeter bumper.
03. Twelve (12) adjustable universal angles.
04. 5" Polyurethane Casters

ITEM NO.200 FIRE PROTECTION SYSTEM QUANTITY 2

Manufacturer: Ansul
Model: R102
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. One (1) fire suppression system for each Type 1 exhaust hood.
02. Provide hood and duct protection and surface protection for all cooking appliances.
03. One (1) wall mounted handheld K Guard fire extinguisher
04. Remote fire pulls as shown on plan with pull guards
05. Provide Mechanical gas shutoff valve to be installed by plumbing contractor.
06. System must meet NFPA 96 standards, Fire Marshal's regulations and UL Standard 300
07. Piping to be unexposed in hood with all exposed drops to be chrome plated.
08. Hood penetrations to be trimmed out in S/S.
09. All hoods, switches and pulls to be properly labeled.

Specific Notes:

Mount fire extinguisher 4' below cabinet.

ITEM NO.201 EXHAUST HOOD QUANTITY 1

Manufacturer: Accurex
Model:
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Captive Aire

01. All 430 18ga S/S fully welded construction size and shape as drawn.
02. Sloped grease trough with S/S filters.
03. Insulated front air supply plenum with adjustable damper in same materials and finish as hood.
04. LED fixtures with lights to be flush mounted.
05. 18ga S/S closure panels to enclose space from top of hood to finished ceiling and S/S finished back panel when exposed.
06. Suspend hood and components at 6' 10" AFF using 1/2" threaded rod by KEC.
07. Factory mounted 3" Back Airspace

08. Exhaust equipment to maintain 18" clearance from combustibles. For clearances less than 18", provide 3" air space with code approved fire barrier/wrap designed and installed to meet ALL local codes and requirements.

Specific Notes:

Hood and components to meet all NSF standards, NFPA 96, UL 710 and current IECC requirements. If hood is installed against a wall made of combustible material, provide 18ga S/S insulated wall panel from bottom of the hood to baseboard/cove base. Electrical contractor to connect light switch to hood as designed and install shunt trip breakers for ALL equipment under hood as required.

ITEM NO.202 EXHAUST HOOD QUANTITY 1

Manufacturer: Accurex
Model:
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Captive Aire

01. All 430 18ga S/S fully welded construction size and shape as drawn.
02. Sloped grease trough with S/S filters.
03. Insulated front air supply plenum with adjustable damper in same materials and finish as hood.
04. LED fixtures with lights to be flush mounted.
05. 18ga S/S closure panels to enclose space from top of hood to finished ceiling and S/S finished back panel when exposed.
06. Suspend hood and components at 6' 10" AFF using 1/2" threaded rod by KEC.
07. Factory mounted 3" Back Airspace
08. Exhaust equipment to maintain 18" clearance from combustibles. For clearances less than 18", provide 3" air space with code approved fire barrier/wrap designed and installed to meet ALL local codes and requirements.

Specific Notes:

Hood and components to meet all NSF standards, NFPA 96, UL 710 and current IECC requirements. If hood is installed against a wall made of combustible material, provide 18ga S/S insulated wall panel from bottom of the hood to baseboard/cove base. Electrical contractor to connect light switch to hood as designed and install shunt trip breakers for ALL equipment under hood as required.

ITEM NO.208 CONVECTION OVEN DOUBLE QUANTITY 1

Manufacturer: Vulcan
Model: EXISTING, RE-USE
Size and Shape: Refer to drawings
Utilities: Refer to drawings.
Alternate:

ITEM NO.213 STEAMER SINGLE QUANTITY 1

Manufacturer: Accutemp
Model: P61201D060 SGL
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. Six (6) pan capacity
02. One (1) steam generator and single compartment.
03. Field reversible insulated door.
04. SNH-11-01 - Support Stand
05. One (1) Everpure Model EV979740 Filtration Systems.
06. One (1) Dormont 1650KITS60

Specific Notes:

Filter to be mounted near unit and be easily accessible for service. Ensure placement of steamer is not over floor drain. Plumbing to filter to be copper with S/S flex lines plumbed to steamers. Flex lines to allow unit to be pulled out 48".

ITEM NO.226 FOUR BURNER RANGE QUANTITY 1

Manufacturer: Southbend
Model: 4367D
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Vulcan

01. Four (4) open burners with battery spark ignition
02. S/S range body on casters.
03. Rear gas connection.
04. S/S flue riser with heavy duty shelf
05. One (1) Dormont 1675KITS60
06. Conventional oven base fully porcelainized with battery spark ignition

ITEM NO.226.1 WALL MOUNTED POT FILLER FAUCET QUANTITY 1

Manufacturer: Krowne
Model: 20-108L
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: T&S

01. One (1) wall mounted pot filler faucet with 6' hose
02. S/S 16ga Custom Fabricated wall mount box to mount filler faucet

ITEM NO.231 COMBI OVEN QUANTITY 1

Manufacturer: Eloma
Model: MultiMax 6-11-2AG
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Convotherm

01. Boilerless combi oven with AutoClean holding (6) 18"x26" sheet pans
02. S/S construction on EL0506916 support stand on casters
03. Factory approved water filtration system
04. One (1) Dormont 1650KITS60 & S/S flexible fill lines

Specific Notes:

Filter to be mounted near unit and be easily accessible for service. Plumbing to filter to be copper with S/S flex lines plumbed to steamers. Flex lines to allow unit to be pulled out 60" without disconnecting.

ITEM NO.240 PIZZA OVEN QUANTITY 1

Manufacturer: TurboChef
Model: HHC1618 VNTLS-36
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Lincoln

****OPTIONAL / FUTURE ITEM****

01. Single oven on stand with casters
02. ChefComm Pro, Listed for Ventless operation
03. Two (2) 6" extensions
04. Abutting tables to be height matched to conveyor belts.

Specific Notes:

Optional / Future Items to be priced in a separate quote.

ITEM NO.242 PIZZA PREP QUANTITY 1

Manufacturer: True
Model: TPP-AT-44-HC
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Continental

****OPTIONAL / FUTURE ITEM****

01. S/S Pizza prep makeup table on casters
02. HDPE cutting board at front
03. Raised rail to hold (6) 1/3rd size pans

Specific Notes:

Optional / Future Items to be priced in a separate quote.

ITEM NO.263 FRYER QUANTITY 1

Manufacturer: Frymaster
Model: GF14
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Pitco

01. 40pd Fryer with millivolt controls
02. S/S Front, door and tank on casters
03. One (1) Dormont 1675KITS60

ITEM NO.264 FRENCH FRY WARMER QUANTITY 1

Manufacturer: Hatco
Model: UGFFBL
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: None

01. Countertop French fry warmer light
02. Heated base with clear anodized finish

ITEM NO.303 PASS-THRU REFRIGERATOR - 1DR QUANTITY 3

Manufacturer: True
Model: STG1RPT-2HG-1S-HC
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Continental

01. S/S front and rear door with aluminum sides and interior.
02. LED interior lights
03. Fourteen (14) pair of universal pan slides per full height opening
04. 6" legs
05. Three (3) years parts and labor and 5-year compressor warranty
06. Glass Half height doors front with solid S/S rear door.
07. Provide S/S trim around wall openings with removable trim above units.

ITEM NO.328 PASS-THRU HEATED CABINET - 2DR QUANTITY 2

Manufacturer: True
Model:
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Continental

01. S/S front and rear door with aluminum sides and interior
02. LED interior lights
03. Fourteen (14) pair of universal pan slides per full height opening
04. 6" legs
05. Three (3) years parts and labor
06. Glass Half height doors on front with solid S/S rear doors.
07. Provide S/S trim around wall openings with removable trim above units.

ITEM NO.401 SERVING COUNTER QUANTITY 1

Manufacturer: Delfield
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: LTI

01. Serving counter to be open base design with storage shelving on operator side.

02. Body to be continuous style ***** construction.
03. Top to be 3cm thick Corian to extend past counter body to function as trayslide.
04. Extended top trayslide area to have SS runners routed into top and LED lights below.
05. All electrical wiring to be hidden and secured neatly in base located inside code approved conduit.
06. All plumbing to be hidden in base and neatly secured. Plumbing to be Type L copper with compression style unions.
07. Supply properly sized load center per counter requirements and wire all electrical components to load center with wiring diagram laminated and attached to door.
08. Provide electrical and plumbing access for service.
09. Countertop to be at 34"H above finished floor.
10. Provide recess for sheetpans at hot wells.
11. Provide and install hardibacker to counter body prepped for tile by GC.
12. S/S legs with adjustable S/S bullet feet and S/S removable kickplates.
13. Provide NEMA 5-20R recessed in counter body end for Item 417 and one (1) convenience outlet in each control panel.
14. Custom control panel to include controls for drop in equipment, lights and heat strips.
15. Four (4) hotwells for wet operation as drawn with common manifolded drain and ball valve located in an easily accessible location.
16. Three (3) hotwells for wet operation as drawn with common manifolded drain and ball valve located in an easily accessible location.
17. Provide deck mounted fill faucet at hotwells.
18. One (1) double tier (2) sheet pan Flexitop with sneezeguard.
19. Provide louvers as required to allow proper airflow for condensing units.
20. Breath guard undercounter mount single tier with 3/8" glass top shelf, end panels and fully adjustable full height front glass for self or full service with LED lights and heat. Mount over hot wells as drawn.

ITEM NO.402

SERVING COUNTER

QUANTITY 1

Manufacturer: Delfield
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: LTI

01. Serving counter to be open base design with storage shelving on operator side.
02. Body to be continuous style ***** construction.
03. Top to be 3cm thick Corian to extend past counter body to function as trayslide.
04. Extended top trayslide area to have SS runners routed into top and LED lights below.
05. All electrical wiring to be hidden and secured neatly in base located inside code approved conduit.
06. All plumbing to be hidden in base and neatly secured. Plumbing to be Type L copper with compression style unions.
07. Supply properly sized load center per counter requirements and wire all electrical components to load center with wiring diagram laminated and attached to door.
08. Provide electrical and plumbing access for service.
09. Countertop to be at 34"H above finished floor.
10. Provide recess for sheetpans at hot wells.
11. Provide and install hardibacker to counter body prepped for tile by GC.

12. S/S legs with adjustable S/S bullet feet and S/S removable kickplates.
13. Provide NEMA 5-20R recessed in counter body end for Item 417 and one (1) convenience outlet in each control panel.
14. Custom control panel to include controls for drop in equipment, lights and heat strips.
15. Four (4) hotwells for wet operation as drawn with common manifolded drain and ball valve located in an easily accessible location.
16. Provide deck mounted fill faucet at hotwells.
17. Provide dedicated 20amp receptacle for Item #440 Slush
18. Provide NEMA L14-20R for Item #428
19. One (1) single tier (2) sheet pan frostop with sneezeguard.
20. Provide louvers as required to allow proper airflow for condensing units.
21. Breath guard undercounter mount single tier with 3/8" glass top shelf, end panels and fully adjustable full height front glass for self or full service with LED lights and heat. Mount over hot wells as drawn.

ITEM NO.413 MILK COOLER 8 CASE QUANTITY 3

Manufacturer: Traulsen
Model: RMC34D6
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Beverage Air

01. Forced air milk cooler S/S interior and exterior
02. Holds twelve (8) 13"x13" milk crates with double door access
03. Bumpers/Corner Guards

Specific Notes:

Milk boxes must be connected to backup generator.

ITEM NO.417 AIR SCREEN MERCHANDISER QUANTITY 2

Manufacturer: Structural Concepts
Model: CO45R
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate:

01. Oasis Self-Service Refrigerated Open Air Screen Case 48"
02. S/S Interior and Exterior finish with lower front panel also S/S
03. Left and Right end panel cutaway with insulated glass, vinyl edging
04. Solid S/S back panel
05. LED shelf lights
06. RollDown Security Locking Night Curtain

ITEM NO.419 MOBILE BACK COUNTER QUANTITY 2

Manufacturer: Custom Fabricated
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. 304 series S/S 14ga top and 16ga undershelves as drawn with edges turned down 2"
02. Provide and install one (1) S/S drawer assembly with S/S pan insert, slides and locks.
03. Set of four (4) 5" S/S bodied casters with polyurethane treads two (2) swivel and two (2) swivel with brake

ITEM NO.421 CASH REGISTER QUANTITY 1

Manufacturer: Owner Furnished
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

ITEM NO.423 GUIDE RAILS BELT STYLE QUANTITY 8

Manufacturer: Winco
Model: CGS-38S
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. Heavy weighted S/S base with 6' 6" retractable black belt.

ITEM NO.424 DIGITAL MENU BOARD QUANTITY 2

Manufacturer: NCR
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

- 01.
- 02.

Specific Notes:

ITEM NO.428 SANDWICH MERCH DOUBLE SLANTED QUANTITY 1

Manufacturer: Hatco
Model: GR2SDS-30D
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: APW

01. Double tier slanted countertop sandwich merchandiser
02. Adjustable thermostat with lights and glass end panels

ITEM NO.429 TRAY AND SILVERWARE DIPSENER QUANTITY 2

Manufacturer: Delfield
Model: EXISTING, RE-USE
Size and Shape: Refer to drawings
Utilities: Refer to drawings.
Alternate:

ITEM NO.430 SOIL TRAY CART QUANTITY 1

Manufacturer: Metro
Model: SSD16
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Cambro

01. Polymer Dish and Tray cart with A110 divider assembly
02. Holds 80 trays per column

ITEM NO.435 CASHIER STAND QUANTITY 1

Manufacturer: OWNER
Model: EXISTING, RE-USE
Size and Shape: Refer to drawings
Utilities: Refer to drawings.
Alternate:

ITEM NO.436 ICE CREAM DISPENSER QUANTITY 1

Manufacturer: OWNER
Model: EXISTING, RE-USE
Size and Shape: Refer to drawings
Utilities: Refer to drawings.

ITEM NO.440 FROZEN BEVERAGE DISPENSER QUANTITY 1

Manufacturer: OWNER
Model: EXISTING, RE-USE
Size and Shape: Refer to drawings
Utilities: Refer to drawings.
Alternate:

ITEM NO.444 HOT WATER DISPENSER QUANTITY 1

Manufacturer: Hatco
Model: AWD-12
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: FETCO

01. Hot water dispenser with 12 gallon capacity with autofill
02. S/S tank and base, digital temp display

ITEM NO.445	CHIP RACK	QUANTITY 1
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Manufacturer: OWNER
Model: EXISTING, RE-USE
Size and Shape: Refer to drawings
Utilities: Refer to drawings.

ITEM NO.446	MANUAL VEGETABLE SLICER	QUANTITY 1
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Manufacturer: Vollrath
Model: 0643SGN
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate:

01. Tomato slicer with 3/16" blade set and safety guard
02. NSF

ITEM NO.502	DISHWASHER HIGH TEMP	QUANTITY 1
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Manufacturer: Jackson
Model: TEMPSTAR HH-E VENTLESS
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Champion

01. Single Rack High Temp High Hood Ventless dishwasher S/S finish.
02. Built-in 70 degree rise booster heater.
03. Pressure regulator and water hammer arrestor included with machine.
04. 37 Racks per hour

ITEM NO.508	CLEAN DISHTABLE	QUANTITY 1
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Manufacturer:	Custom Fabricated
Model:	---
Size and Shape:	Refer to drawings
Utilities:	Refer to drawings

01. 304 series S/S 14ga top with 16ga under shelves as drawn.
02. Free edges to be rolled rim style 3 1/2" H X 1 1/2" with 10"H splash at abutting walls.
03. Omit front rail at booster when shown
04. Provide S/S adjustable flanged feet for front legs and S/S adjustable bullet feet rear.
05. Slope tabletop towards dish machine for drainage.

Specific Notes:

Anchor flanged feet to floor after leveling

ITEM NO.510	THREE COMP SINK W/DISPOSER	QUANTITY 1
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Manufacturer: Custom Fabricated
Model: ---

Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. 304 series S/S 14ga top with 16ga undershelves as drawn.
02. Free edges to be rolled rim style 3 1/2" H X 1 1/2" with 10"H splash at abutting walls.
03. Omit rear rail at sink bowls and at disposer when shown.
04. Two (2) T&S model # B-0291, splash mount faucet, 18" jointed swing nozzle
05. Three (3) Krowne 22-507 twist waste valve drains with overflow
06. Provide One (1) T&S model #B-0133-cr-b08sk pre-rinse
07. Provide S/S 16ga welded bracket to secure drain handles and S/S 14ga mounting plate for disposer control.
08. Two (2) 24"x26"x15" D 14ga sink bowls and one (1) 26"x30"x15" D 14ga sink bowl.
09. S/S 1 5/8" Upright post to extend thru backsplash with a 12" D 16ga perforated overshelf mounted at 18" above work surface. Post to continue vertically then turn out 12" D at 7" AFF. Weld 2" x 1/4" S/S flat bar across post and provide Advance Tabco model TA-86 S/S double sided pot hooks every 6".
10. Install disposer and control panel as drawn with fully welded sink cone.
11. Provide S/S adjustable flanged feet for front legs and S/S adjustable bullet feet for all others. Anchor flanged feet to floor after leveling.
12. Provide T&S model B-0674-BSTP and rack mount on S/S 12ga bracket.

Specific Notes:

When disposer is shown, provide notch in backsplash to accommodate vacuum breaker.
 When overshelf is shown above disposer with pre-rinse, provide cutout in shelf to accommodate pre-rinse. Ensure disposer bracket is recessed enough that control does not protrude past front leg of table.

ITEM NO.514

MOBILE UTENSIL RACK

QUANTITY 1

Manufacturer: Metro
Model: PR48VX4
Size and Shape: Refer to drawings
Utilities: None
Alternate: Cambro Premium

01. Mobile drying rack with four (4) tiers
02. Two (2) cutting board tray drying racks
03. Two (2) pan racks
04. Four (4) polymer casters (2) with brakes

4.6 FOODSERVICE EQUIPMENT: CULINARY KITCHEN

ITEM NO.C15

AIR SCREEN

QUANTITY 1

Manufacturer: Mars
Model: STD-2 Series
Size and Shape: Refer to drawings
Utilities: Refer to drawings

Alternate: Berner

01. STD-2 Series unheated air door sized to fit kitchen doors, black finish.
02. Plunger type remote mounted door switch.
03. Verify all mounting clearances to door before installing.
04. Verify finish/color with owner prior to ordering.

Specific Notes:

Electrical contractor to provide and install flex conduit to j-box of air curtain and neatly secure it to the building. Provide door switch to G.C. for installation by electrical contractor.

ITEM NO.C16 DRY STORAGE SHELVING QUANTITY 1

Manufacturer: Metro
Model: MetroMax Q
Size and Shape: Refer to drawings
Utilities: None
Alternate: Cambro Elements

01. Each shelving unit to have five (5) tiers with four (4) post and removable vented mats.
02. Provide four (4) 86" posts per unit.
03. Verify sizes, widths, and lengths per drawings.
04. Quantity of one (1) to equal one (1) Lot consisting of all shelving shown in the dry storage area.

Specific Notes:

Field verify sizes and quantities. Provide shelving layout submittal to be approved prior to ordering.

ITEM NO.C22 JANITOR SINK QUANTITY 1

Manufacturer: BY PLUMBER
Model: ----
Size and Shape: Refer to drawings
Utilities: Refer to drawings

ITEM NO.C23 MOP / BROOM HOLDER QUANTITY 1

Manufacturer: U-Line
Model: H-2841
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. Mop Hanger, 24" stainless steel
02. If quantity more than (1) butt end to end
03. Secure to wall

ITEM NO.C24 HAND SINK QUANTITY 3

Manufacturer: BY PLUMBER
Model: ----
Size and Shape: Refer to drawings
Utilities: Refer to drawings

ITEM NO.C100 ICE MACHINE W/BIN QUANTITY 1

Manufacturer: Manitowoc
Model: RNP0320A/D-420
Size and Shape: Refer to drawing
Utilities: Refer to drawing
Alternate: Hoshizaki

01. One (1) filtration system with one (1) pre-filter
02. One (1) Nugget Style ice maker model no. RNP0320A.
03. One (1) ice bin model no. D-420.
04. Stainless steel legs with flange feet
05. K00463 Ice Scoop

Specific Notes:

Filtration system to be easily accessible for service and mounted to abutting wall. Supply line to filtration system to be plumbed in copper. Supply line from filter to ice maker to be a flexible line that provides enough length to pull ice maker away from wall 48" without disconnecting. Final connections to be made by plumbing contractor. Attach water filter overflow tube to rear of ice maker/bin and route to floor sink.

ITEM NO.C105 TWO COMP PREP SINK QUANTITY 1

Manufacturer: Custom Fabricated
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. 304 series S/S 14ga top with ½" Marine edge and 16ga undershelves as drawn.
02. Edges to be turned down 2" at free sides with 10"H splash at abutting walls.
03. Omit rear rail at sink bowls and at disposer when shown.
04. One (1) T&S model # B-0291, splash mount faucet, 18" swing nozzle
05. Two (2) Krowne 22-507 twist waste valve drains
06. Provide One (1) T&S model #B-0133-cr-b08sk pre-rinse
07. Provide S/S 16ga welded bracket to secure drain handles and S/S 14ga mounting plate for disposer control.
08. Two (2) 18"x26"x15" D 14ga sink bowls
09. Two (2) "Richlite" ½" thick removable sink covers with 1" finger hole left and right installed at each sink. Weld S/S ¼" round bar set 5/8" below work surface at all four corners to support sink covers. Provide S/S channel support storage holder for sink covers at right or left end of counter.
10. Provide raised platform as drawn and mount one (1) Edlund model no. S-11.
11. Provide S/S adjustable flanged feet for front legs and S/S adjustable bullet feet for all others. Anchor flanged feet to floor after leveling.

Specific Notes:

When disposer is shown, provide notch in backsplash to accommodate vacuum breaker.
When overshef is shown above disposer with pre-rinse, provide cutout in shelf to accommodate pre-rinse.

ITEM NO.C113 MOBILE WORKTABLE QUANTITY 8

Manufacturer: Custom Fabricated
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. 304 series S/S 14ga top and 16ga undershef as drawn with edges turned down 2"
02. Provide and install two (2) SS drawer assemblies with S/S pan insert, slides and lock per table for 60" tables and longer or one (1) S/S drawer assembly for tables less than 60".
03. Set of four (4) 5" S/S bodied casters with polyurethane treads two (2) swivel and two (2) Swivel with brake

Specific Notes:

When worktable is next to conveyor oven-Recess one (1) of the table tops from front edge to accept 1/2" thick HDPE cutting board 24"x24" with stainless pin indexes at rear. Cutting board to be flush to stainless top. HDPE cutting board to be provided and installed by KEC. Tables to be height matched to conveyor belts.

ITEM NO.C114 20 QT. MIXER W/STAND QUANTITY 1

Manufacturer: Globe
Model: SP20
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Hobart

01. 20 Qt. Planetary Mixer on Advance Tabco MX-SS-242 stand
02. SS bowl, dough hook, beater and whip

ITEM NO.C116 UTILITY CART SS QUANTITY 1

Manufacturer: Lakeside
Model: 544
Size and Shape: Refer to drawings
Utilities: None
Alternate: Caddy

01. Stainless Steel 3 shelf cart
02. Four (4) casters two (2) with brakes and perimeter bumpers

ITEM NO.C117 UTILITY CART POLYMER QUANTITY 2

Manufacturer: Metro
Model: 544
Size and Shape: Refer to drawings
Utilities: None
Alternate: Cambro

01. Polymer 3 shelf deep ledge cart
02. Four (4) casters two (2)

ITEM NO.C121 BAKER'S TABLE W/BINS QUANTITY 1

Manufacturer: Custom Fabricated
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. 304 series S/S 14ga top as drawn with marine edge and 8"H rear splash
02. Provide three (3) Cambro IBS20 mobile ingredient bins
03. 3 Tier SS drawer assembly in enclosed cabinet base as drawn
04. S/S 1 5/8" Upright post to extend thru backsplash with a 12" D 16ga overshelf mounted at 18" above work surface. Post to continue vertically then turn out 12" D at 7' AFF. Weld 2" x 1/4" S/S flat bar across post and provide Advance Tabco model TA-86 S/S double sided pot hooks every 6".

ITEM NO.C124 MOBILE HEATED CABINET QUANTITY 1

Manufacturer: Metro
Model: C549-ASDS-UA
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Carter Hoffman

01. Insulated cabinet with SS door and interior.
02. Top mount controls and analog thermometer
03. Dutch solid doors
04. Capacity of (16) 18"x26" or (32) 12"x20" pans on 1 1/2" adjustable slides
05. 5" Casters (2 with brakes)

ITEM NO.C200 FIRE PROTECTION SYSTEM QUANTITY 2

Manufacturer: Ansul
Model: R102
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. One (1) fire suppression system for each Type 1 exhaust hood.
02. Provide hood and duct protection and surface protection for all cooking appliances.
03. One (1) wall mounted handheld K Guard fire extinguisher
04. Remote fire pulls as shown on plan with pull guards
05. Provide Mechanical gas shutoff valve to be installed by plumbing contractor.

06. System must meet NFPA 96 standards, Fire Marshal's regulations and UL Standard 300
07. Piping to be unexposed in hood with all exposed drops to be chrome plated.
08. Hood penetrations to be trimmed out in S/S.
09. All hoods, switches and pulls to be properly labeled.

Specific Notes:

Mount fire extinguisher 4' below cabinet.

ITEM NO.C207 CONVECTION OVEN DOUBLE QUANTITY 1

Manufacturer: Vulcan
Model: VC44GD
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Hobart

01. Solid state controls with 60-minute timer
02. Simultaneous doors both with glass
03. 1/2 HP 2-speed motor per deck with cool down switch
04. Set of four casters
05. Five (5) oven racks per compartment.
06. Provide S/S backs when exposed.
07. Common gas manifold
08. (1) Dormont 1675KITS60

ITEM NO.C213 STEAMER SINGLE QUANTITY 1

Manufacturer: Accutemp
Model: EXISTING, RE-USE
Size and Shape: Refer to drawings
Utilities: Refer to drawings

ITEM NO.C229 TEN BURNER RANGE QUANTITY 1

Manufacturer: Garland
Model: EXISTING, RE-USE
Size and Shape: Refer to drawings
Utilities: Refer to drawings

ITEM NO.C231 COMBI OVEN QUANTITY 1

Manufacturer: Eloma
Model: MultiMax 6-11-2AG
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Convotherm

01. Boilerless combi oven with AutoClean holding (6) 18"x26" sheet pans
02. S/S construction on EL0506916 support stand on casters
03. Factory approved water filtration system
04. One (1) Dormont 1650KITS60 & S/S flexible fill lines

Specific Notes:

Filter to be mounted near unit and be easily accessible for service. Plumbing to filter to be copper with S/S flex lines plumbed to steamers. Flex lines to allow unit to be pulled out 60" without disconnecting.

ITEM NO.C254 36" GRIDDLE QUANTITY 1

Manufacturer: Imperial
Model: IMGA-3628
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Vulcan

01. 36" Gas griddle with ¾" plate and manual controls
02. S/S construction with S/S legs
03. One (1) Dormont 1675KITS60

ITEM NO.C259 36" CHARBROILER QUANTITY 1

Manufacturer: Imperial
Model: IAB-36
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Vulcan

01. 36" Gas charbroiler with adjustable grates (3) positions
02. S/S construction with S/S legs
03. One (1) Dormont 1675KITS60

ITEM NO.C263 FRYER QUANTITY 1

Manufacturer: Frymaster
Model: GF14
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Pitco

01. 40pd Fryer with millivolt controls
02. S/S Front, door and tank on casters
03. One (1) Dormont 1675KITS60
04. One (1) PF50S portable filter

ITEM NO.C273 72" REFRIGERATED EQUIPMENT STAND QUANTITY 1

Manufacturer: True
Model: TRCB-72
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Continental

01. 72" Refrigerated base with drawers on casters
02. S/S exterior construction
03. 16ga S/S heavy duty top

ITEM NO.C301 REACH-IN REFRIGERATOR 2DR QUANTITY 2

Manufacturer: True
Model: STG2R-4HS-HC
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Continental

01. Two door reach in cooler on casters
02. S/S and aluminum construction
03. S/S half doors with locks

ITEM NO.C314 REACH-IN FREEZER 3DR QUANTITY 1

Manufacturer: True
Model: STG3F-6HS
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: Continental

01. Three door reach in freezer on casters
02. S/S and aluminum construction
03. S/S half doors with locks

ITEM NO.C403 SERVING COUNTER QUANTITY 1

Manufacturer: Custom
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. Serving counter to be open base design with storage shelving on operator side.
02. Body to be all S/S construction with S/S tubing
03. Top to be 14ga S/S with 2" turndowns all sides.
04. 16ga S/S undershelves with 18ga S/S front and sides and rear skirt .
05. Countertop to be at 34"H above finished floor.
06. S/S legs with adjustable S/S bullet feet and S/S removable kickplates.

ITEM NO.C424 DIGITAL MENU BOARD QUANTITY 1

Manufacturer: NCR
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

- 01.
- 02.

ITEM NO.C444 HOT WATER DISPENSER QUANTITY 1

Manufacturer: Hatco
Model: AWD-12
Size and Shape: Refer to drawings
Utilities: Refer to drawings
Alternate: FETCO

- 01. Hot water dispenser with 12 gallon capacity with autofill
- 02. S/S tank and base, digital temp display

ITEM NO.C447 DRY DISPLAY CASE QUANTITY 1

Manufacturer: Structural Concepts
Model: CGS2830
Size and Shape: Refer to drawings
Utilities: Refer to drawings

- 01. Countertop dry display case with three (3) adjustable levels
- 02. LED lights and rear swinging glass doors

ITEM NO.C448 REFRIGERATED DISPLAY CASE QUANTITY 1

Manufacturer: Structural Concepts
Model: B3424
Size and Shape: Refer to drawings
Utilities: Refer to drawings

- 01. Open front refrigerated merchandiser with S/S interior
- 02. Four (4) removable shelves with LED lights
- 03. Rear loading hinged doors
- 04. Solid locking security cover

ITEM NO.C509 THREE COMP SINK QUANTITY 1

Manufacturer: Custom Fabricated
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

- 01. 304 series S/S 14ga top with 16ga undershelves as drawn.
- 02. Free edges to be rolled rim style 3 1/2" H X 1 1/2" with 10"H splash at abutting walls.

03. Omit rear rail at sink bowls and at disposer when shown.
04. Two (2) T&S model # B-0291, splash mount faucet, 18" jointed swing nozzle
05. Three (3) Krowne 22-507 twist waste valve drains with overflow
06. Provide S/S 16ga welded bracket to secure drain handles.
07. Two (2) 24"x26"x15" D 14ga sink bowls and one (1) 26"x30"x15" D 14ga sink bowl.
08. S/S 1 5/8" Upright post to extend thru backsplash with a 12" D 16ga perforated overshef mounted at 18" above work surface. Post to continue vertically then turn out 12" D at 7' AFF. Weld 2" x 1/4" S/S flat bar across post and provide Advance Tabco model TA-86 S/S double sided pot hooks every 6".
09. Provide S/S adjustable flanged feet for front legs and S/S adjustable bullet feet for all others. Anchor flanged feet to floor after leveling.

Specific Notes:

When disposer is shown, provide notch in backsplash to accommodate vacuum breaker.
When overshef is shown above disposer with pre-rinse, provide cutout in shelf to accommodate pre-rinse. Ensure disposer bracket is recessed enough that control does not protrude past front leg of table.

ITEM NO.C514

MOBILE UTENSIL RACK

QUANTITY 1

Manufacturer: Metro
Model: PR48VX4
Size and Shape: Refer to drawings
Utilities: None
Alternate: Cambro Premium

01. Mobile drying rack with four (4) tiers
02. Two (2) cutting board tray drying racks
03. Two (2) pan racks
04. Four (4) polymer casters (2) with brakes

ITEM NO.C602

CULINARY COUNTER

QUANTITY 1

Manufacturer: Custom Fabricated
Model: ---
Size and Shape: Refer to drawings
Utilities: Refer to drawings

01. 304 series S/S 14ga top and 16ga undershef as drawn with edges turned down 2"
02. Provide and install two (2) SS drawer assemblies with S/S pan insert, slides and lock per table.
03. Set of four (4) 5" S/S bodied casters with polyurethane treads two (2) swivel and two (2) Swivel with brake

END OF SECTION 11400