Attachment VII

SECTION 11 40 00

FOOD SERVICE EQUIPMENT

PART 1 – GENERAL

This specification is provided as part of the early procurement equipment package and outlines the manufacturers and model numbers of the equipment to be purchased. Reference the drawings and equipment schedule for actual equipment identified as being part of the early procurement package. All other references to installation and products will be part of the base bid construction package issued at a later date.

Complete equipment submittals are due at the time of pricing submission for the early equipment package. Any pricing submitted without a submittal package will not be accepted. Refer to 1.9 below for submittal requirements. Incomplete submittals will not be accepted.

Refer to Tomball ISD for information related to equipment delivery dates, equipment storage requirements, warranty and process for unloading equipment to Owner designated location.

1.1 RELATED DOCUMENTS

A. The general provisions of the Contract, including General and Supplementary Conditions and General Documents, apply to the Work specified in this Section.

1.2 SUMMARY OF THE WORK

A. Project Name and Location: West Intermediate School

17702 Mueschke Rd, Cypress, TX 77433

- B. Approval of Working Surface: Any contractor performing work over the work of other contractors shall notify the Architect of any unsatisfactory conditions. Beginning of work by any contractor shall constitute acceptance of the previous work.
- C. Field Verification of All Dimensions: Before ordering any materials or doing any work, field verify all measurements of the building and be responsible for the accuracy of them. No extras will be allowed for variations from drawings in existing conditions or for work performed under this contract. Any discrepancies found shall be submitted to the Architect or Foodservice Design Professionals (FDP) for instructions before proceeding.
- D. Cutting and Patching: No excessive cutting will be permitted, nor shall any structural members be cut without the written approval of the Architect. Each Contractor shall leave all chases and openings straight, true and of the proper size in their work as may be necessary for the proper installation of their and other contractors' work. After such work has been installed, contractor shall carefully fit around, close, repair, patch and point up same as directed, to the satisfaction of the Architect.
- E. Cooperation: The General Contractor, all other contractors and all subcontractors shall coordinate their work with all adjacent work and shall cooperate with all other trades to facilitate the general progress of the work. Each trade shall afford all the other trades every reasonable opportunity for installation of their work and storage of their material.
- F. Inspection and Tests: Architect, Owner, Foodservice Design Professionals (FDP), and their representative shall always have access to the work whether it is in preparation or progress. Provide proper and safe facilities for such access and inspection.

G. Fees, Permits and Inspections: Secure and pay fees for all permits, licenses, and inspections as required by all authorities having jurisdiction. Give all notices and comply with all laws, ordinances, codes, rules, regulations, and contract requirements bearing on the work.

1.3 SCOPE OF WORK

- A. Include the Work specified, shown or inferable as part of Food Service Equipment. Portions of this Work may be subcontracted to those qualified to do such work, as may be necessary because of jurisdictional trade agreements and restrictions.
- B. The General Contractor is responsible for Related Work specified in other Sections: i.e., final plumbing, electrical and mechanical connections. The Kitchen Equipment Contractor (KEC) is responsible for all internal connections when specified.
- C. 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 shall be considered as mutually explanatory. Work required by one, but not by the other, shall be performed as though required by both. Items required by one, but not by the other shall be provided as though required by both. Work shall be accomplished as called for in specifications and shown on drawings, so that all items of equipment shall be completely functional for purpose for which they were designed and intended. Provide all necessary material, tools, equipment, and labor required for the complete delivery, un-crating, erection, and installation as designated on the food service equipment plan and, in the specifications, to be made ready for final connection by the appropriate Division contractors. When there is any discrepancy between drawings and specifications, bidders should seek clarification of any discrepancies from the Architect and or Foodservice Design Professionals (FDP) prior to bidding.
- D. Should the drawings disagree in themselves, or the specifications with the drawings, (and clarification was not sought prior to bidding), the better quality, more stringent, and/or greater quantity of the work or materials shall be completed without additional costs to the Owner.

1.4 OTHER DIVISIONS/CONTRACTORS RELATED WORK

A. Division 03 (Concrete) responsible for but not limited to:

- 1. Slab depressions reinforced concrete wearing bed at prefabricated cold storage assemblies.
- 2. Concrete or masonry platforms (with finished top and coved base at perimeter) for raised setting of food service equipment.
- 3. Slab depressions to receive stainless steel drain trench liner/grate assemblies (provided under this Section).

B. Division 09 (Finishes) responsible for but not limited to:

1. Interior finished floor with coved base at prefabricated cold storage assemblies.

C. Division 10 (Specialties) responsible for but not limited to:

- 1. S/S Corner Guards throughout kitchen (unless specified otherwise).
- Lockers.

D. Division 22 (Plumbing) responsible for but not limited to:

1. All connections shall be made in accordance with local codes and national standards, except where plans and specifications exceed those codes and standards.

- 2. Empty PVC and wide-sweep bends for refrigerant piping to beverage lines, Co2 lines, and remote food service equipment refrigeration systems.
- 3. Rough-in and final connection of plumbing systems to food service equipment, and between components (including materials and labor). Accessories provided loose with food service equipment by Section 11 40 00 to be field installed by Division 22. This includes but is not limited to installation of all faucets (water fill faucets, pre-rinse faucets, etc.), hoses, gas disconnects, and drains from equipment point of connection to building plumbing systems.
 - a. Kitchen Equipment Contractor is responsible for providing all faucets (water fill faucets, pre-rinse faucets, etc.), drain fittings, mixing valves, control valves, water pressure regulators, vacuum breakers, and all accessories for equipment specified under 11 40 00. Division 22 is responsible for installation.
- 4. Indirect drain line runs from equipment to nearest drain or floor sink. Lines to be copper.
- 5. Gas Supply Systems with all components and fittings as required for a complete system.
- 6. Water Supply Systems with all components and fittings as required for a complete system.
- 7. Compressed Air Systems with all components and fittings as required for a complete system.
- 8. Piping and Drainage Systems (Sanitary and grease laden). Systems to be cleaned prior to final connection with food service equipment.
- 9. Floor Sinks (Provide and Install). Flange and grates to be flush with finished floor.
- 10. Floor Drains (Provide and Install). Flange and grates to be flush with finished floor.
- 11. Trench Drains (Provide and Install). Trench Liners provided by 11 40 00. Flange and liners to be flush with finished floor.
- 12. Grease Traps as required. Verify with local codes to bypass or pipe thru Grease Trap and/or Interceptor.
- 13. P-Traps as required (including all disposers).
- 14. Interconnect water thru Water Filter (Filter provided by 11 40 00 unless otherwise specified) to equipment.
- 15. Gas Quick Disconnect Installation (Quick Disconnect provided by 11 40 00).
- 16. Safety Restraint Cable Installation (Safety Restraint Cable Provided by 11 40 00).
- 17. Specified couplings and piping to all equipment furnished by 11 40 00.
- 18. Air Compressors (Size, Provide, and Install, unless otherwise specified).
- 19. Water Softeners (Size, Provide, and Install, unless otherwise specified).
- 20. Pressure Boilers (Size, Provide, and Install, unless otherwise specified).
- 21. Hand Sinks (Provide (unless otherwise specified) and Install). Provide hot water tempering valve if required.
- 22. Ice Bin Drain Insulation (Provide and Install).

- 23. Unions at disposer solenoid valves (Provide and Install).
- 24. Back Flow Prevention as required (Provide and Install including all disposers). Back-Siphonage shall be installed at all fixtures and equipment where backflow and/or back-siphonage may occur and where a minimum air gap cannot be provided between the water to the fixture or equipment at its flood/level rim. Vacuum breakers, when furnished with equipment, shall override the above, if acceptable with applicable codes. Division 22 responsible for verifying requirement with local codes.
- 25. Janitor Sink with Faucet (Provide and Install).
- 26. Freeze Proof Hose Bibb at exterior of building by receiving door (Provide and Install unless otherwise specified).
- 27. Reverse Osmosis Systems (Size, Provide (unless otherwise specified), Locate and Install).
- 28. All piping within counter body or under fabricated counters to be run to a connection point below counter body by Section 11 40 00. Final connection by Division 22.
- 29. Exhaust Hood condensate drain connections (Provide and Install).
- 30. Interconnection of ½" CW to Pre-Rinse and Disposers cone/body inlets piped through solenoid and vacuum breaker.
- 31. Fire System Piping. Exposed piping to be chrome plated.
- 32. Pipe ½" cold water to swirl inlets at disposers.
- 33. Water Treatment for Ice Builders (Non-Chlorinated water with a PH Level of 10 or Higher) and any drains and overflows. Piping from Ice Builders to Tumble Chillers by Div. 23.
- 34. Refer to Section 2.2 PLUMBING / MECHANICAL REQUIREMENTS for additional information.

E. Division 23 (Mechanical) responsible for but not limited to:

- 1. All connections shall be made in accordance with local codes and national standards, except where plans and specifications exceed those codes and standards.
- 2. Empty EMT Conduit with pull-wire and wide-sweep bends for refrigerant piping to remote food service equipment refrigeration systems.
- 3. Rough-in and final connection of mechanical systems to food service equipment, cold storage assemblies, and between components (including materials and labor).
- 4. Testing and balancing for rooms and exhaust hoods to be performed by mechanical contractor. Balance report for food service Exhaust Hoods to be provided to Foodservice Design Professionals (FDP) immediately upon completion (send to Houston.Submittal@fdp.org) and must be submitted with O&M manuals.
- 5. Exhaust Hoods, Condensate Hoods, Fire Suppression Systems, connections, and controls (Provide and Install unless otherwise specified).
 - a. If Exhaust/Condensate Hoods and Fire Suppression Systems are specified under Section 11 40 00, Division 23 is responsible for all Exhaust and Condensate Hood connections (Provide and Install).
- 6. VFD System and controllers when required by code (Provide and Install).

- 7. Provide and install all ventilation (direct or indirect), air conditioning, and heating systems (unless otherwise specified).
- 8. Coordinate Supply and Return ducts above Serving Counters. No cold air blown directly on hot food counters.
- 9. Coordinate Supply and Return ducts away from equipment with top mounted refrigeration. No air blown directly on compressors.
- 10. Mechanical Contractor to locate temperature monitors within return ducts.
- 11. Circulating air above cold storage assemblies (Provide and Install).
- 12. Circulating air above and in air gaps at Warehouse cold storage assemblies (Provide and Install).
- 13. Water Chillers as required (Provide, Size and Locate).
- 14. Piping from Ice Builders to Tumble Chillers (Size, Provide and Install).
- 15. Refer to Section 2.2 PLUMBING / MECHANICAL REQUIREMENTS for additional information.

F. Division 26 (Electrical) responsible for but not limited to:

- 1. Rough-in and final connection of electrical systems to food service equipment, cold storage assemblies, and between components (including materials and labor). Accessories provided loose with food service equipment by Section 11 40 00 to be field installed by Division 26.
- 2. Empty EMT Conduit with pull-wire and wide-sweep bends for refrigerant piping to remote food service equipment refrigeration systems.
- 3. Empty EMT Conduit with pull-wire and wide-sweep bends for interconnect cables between LAN and POS terminals, change-makers, pre-check units, printers, CPUS, etc. Division 26 to verify where conduit is to run for POS System (i.e.: Manager's Office or IDF Room).
- 4. Empty EMT Conduit with pull-wire and wide-sweep bends for fire suppression systems. Interconnect Fire Protection System to panel box shunt trips and building alarm.
- 5. Walk In Light Fixture Installation (Provided loose by Section 11 40 00).
- 6. Table Limit Switch Installation (Provided loose by Section 11 40 00).
- 7. Electrical Materials and Devices (Shunt-trip breakers, surge protectors, lighting control devices, conduit, wire, etc.).
- 8. Switches and Stainless Steel Disconnects as required (Provide, Locate, and Install to be in an accessible location).
- 9. Charging Stations for Forklifts, Pallet Stackers, and Pallet Jacks (Size, Provide, Locate, and Install).
- 10. Interconnection between Condensate Fan and Dishmachine control panel.
- 11. Interconnection between Exhaust Hood fans and switch.
- 12. Interconnection between Exhaust Hood lights and switch.

- 13. Door Heaters, Lights, Coils and Pressure Relief Ports pre-wired to junction box at top of cold storage assemblies provided by Section 11 40 00. Final connection by Div. 26.
- 14. Cord and plug on equipment that does not come with cords/plug (i.e.: Braising Pans, Kettles, Ice Machines, Steamers, Combi Ovens, etc.) (Provide and install).
- 15. Provide waterproof receptacles in wet areas.
- 16. All electrical connections beneath Exhaust Hoods to extend to shunt trip breakers with electrical panel box for shutdown during fire mode.
- 17. Receptacles to be pre-wired to Junction Box or Load Center for final connection by Division 26.
- 18. All electrical lighting, power, and distribution systems.
- 19. Do not interconnect more than three (3) convenience outlets on one (1) breaker.
- 20. Other than convenience outlets, all electrical connections shown on food service plans are dedicated breakers.
- 21. Doorbell at receiving door (Provide and Install to be audible throughout Kitchen, Office, and Dry Storage room).
- 22. Adequate lighting at receiving door.
- 23. Refer to Section 2.5 ELECTRICAL REQUIREMENTS for additional information.

G. Division 27 (Communication) responsible for but not limited to:

- 1. Data line coordination for food service equipment.
- 2. Time clocks.
- 3. Video cameras for learning assistance in any food service areas as required (Provide, Locate, and Install).

H. Division 28 (Electronic Safety and Security) responsible for but not limited to:

1. Security Cameras as required (Provide, Locate, and Install).

I. General Contractor responsible for but not limited to:

- 1. Any wall penetration required for food service equipment utilities. Escutcheon plates or S/S sleeves to be provided and installed as needed.
- 2. Bulk Freezer Ventilation Pipe (Provide and Install, unless otherwise specified).
- 3. Core drilling for Guide Rails.
- 4. Refrigeration Roof Curbs / Roof Jack.
- 5. Interior Bollards to be epoxy painted per local codes (Provide and Install).
- 6. Provide and Install ¾" Plywood blocking in wall for mounting equipment furnished by Section 11 40 00 as required.
- 7. Walk-In Depressions (to be dead level) and sand levelling bed.
- 8. Structural bracing for Bulk Walk-In ceiling panels if required.

- 9. Menu System Video Monitors in Servery (unless otherwise specified).
- 10. Structural bracing for Menu System Video Monitors if required.
- 11. Interior/Exterior refrigeration penetrations and sleeves at building penetrations.
- 12. Peephole at receiving door.
- 13. Canopy at receiving door.
- 14. Soap and towel dispenser provided by Owner. G.C. responsible for installation.
- 15. Washer and Dryer (Provide and Install, unless otherwise specified).
- 16. Dwarf-wall at exposed front/ends of cafeteria serving counters with finish as selected by Architect.
- 17. Final cleaning of all equipment prior to demonstrations.

1.5 QUALITY ASSURANCE

- A. In addition to complying with all applicable laws, statutes, building codes and regulations of public authorities, comply with the following:
 - 1. National Sanitation Foundation (all equipment to bear label)
 - 2. National Electric Code
 - 3. Underwriters' Laboratories, Inc. (all applicable equipment to bear label)
 - 4. American Gas Association Laboratories
 - 5. National Fire Protection Association
 - 6. Americans with Disabilities Act
 - 7. Food and Drug Administration HAACP Guidelines
 - 8. International Energy Conservation Code (IECC)
 - 9. Department of Energy
 - 10. Environmental Protection Agency
- B. Furnish certification of regularly manufactured equipment listing or classification by Underwriter's Laboratories, Inc. with initial submittal.
- C. Furnish list of equipment and components (internal and external) that are not of domestic origin. All equipment and components (internal and external) should be of domestic origin when possible. This information should be provided with the initial submittal.
- D. Projects outside the continental United States shall adhere to all local authorities having jurisdiction over that project.

1.6 SUBSTITUTIONS

A. Equipment items or components specified are intended to be the Basis of Bid. All other brands, including any additional names, which may be listed as "Alternates" or "Approved Equal," must

conform with the general and item specifications, warranties, size/dimensions, quality, accessories, function, voltage, horsepower, etc. of the first-named brand and be subject to Paragraph C-03 of this Article.

B. Proposed Substitutions:

- 1. Submitted no less than 14 calendar days prior to Bid Date.
- 2. Submit proposed substitutions with catalogue data and/or manufacturer's shop details indicating all modifications required to conform with specified brand.
- 3. List of deviations must include listing of equipment name, model number, accessories and features with deviation(s) noted for both specified and proposed alternate equipment. Equipment without listed deviation(s) will be considered furnished as specified.

C. Substitutions with prior approval:

- 1. Submitted on Bidder's letterhead attached to Proposal Form with individual additive/deductive amounts stipulated and the documentation required in Paragraph B-02.
- Owner reserves the right to accept or reject any or all substitution proposals before execution of Contract
- 3. Provide all design/engineering services required to adjust in space, systems, utilities, etc. and pay all additional costs of utilities, construction or professional services that may be incurred due to the acceptance of any substitution.
- D. All appliances within common group or category (e.g., refrigerators, kettles, ovens, etc.): same manufacturer.

1.7 INTERPRETATION OF DOCUMENTS

A. During Bidding: Bidder's, supplier's or vendor's questions and comments pertaining to Construction Document's clarity or intent will be addressed by addendum.

B. After Award:

- 1. Clarification Bulletin will provide confirmation of Construction Document requirements.
- 2. Request for Information submitted by Contractor shall contain Contractor's proposed resolution.

1.8 WARRANTY

- A. Provide a written warranty for parts and labor for a period of one year from the date of Substantial Completion, including extended four-year replacement warranty on compressor bodies.
- B. Components of equipment subject to replacement prior to one-year's use (such as refrigerator door gaskets) and those items which may fail due to improper or inadequate periodic maintenance by the Owner/Operator (such as an uncleaned refrigeration system condenser) are not intended to be included within the scope of the Warranty.
- Refrigeration Systems/Equipment: One-year free service available within twenty-four hours of notification.
- D. Furnish three copies of a list of all equipment and their respective local service agencies, indicating the address, telephone number and name of person to contact. Whenever possible, the service agencies selected shall be factory-authorized for the equipment assigned.

- E. Provide following for refrigeration systems/equipment, unless specified otherwise:
 - 1. One (1) year free service available within twenty-four hours of notification, for refrigeration systems.
 - 2. Provide five (5) year manufacturer's registered written replacement, warranty certificate, covering compressor bodies. Warranty to cover labor costs for first year.
 - 3. Provide ten (10) year manufacturer's registered written replacement/repair, warranty certificate, covering walk-in panels. Warranty to cover defects in material and workmanship. Warranty to cover labor costs for first year.
 - 4. Provide one (1) year parts and labor warranty for all parts of refrigeration system(s) and walk-in cooler(s) and freezer(s), not otherwise covered herein.
- F. All above stated warranty periods are from date of Substantial Completion. All replacement parts due to a warranty call should be of same quality as the original. Replacement parts should be of a domestic origin where possible.

1.9 SUBMITTAL DATA

- A. Special Requirements: The following are in addition to any general requirements given elsewhere in the Documents.
- B. Submittal Requirements:
 - 1. Kitchen Equipment Contractor to furnish all submittals via PDF, drawings to be scaled per General Specifications and provided in Three (3) submittal packages.
 - Foodservice Design Professionals requires the below listed business days for each package submitted. Packages to be submitted with 14 days between each issued package. Each package should contain individual submittal sets.
 - a. Package One to include (2) Individual sets: 10 Business Days for Review
 - i. Equipment rough-in
 - ii. Equipment Brochure
 - b. Package Two to include (3) Individual sets: 10 Business Days for Review
 - i. Exhaust Hoods
 - ii. Cold Storage Assemblies
 - iii. Refrigeration
 - c. Package Three to include (4) Individual sets: 15 Business Days for Review
 - i. Custom Fabrication
 - ii. Serving Counters
 - iii. Merchandising Equipment
 - iv. Miscellaneous Submittals
- C. Submittals to be identified with the below listed file name structure:

- 1. 11 4000-1 EQUIPMENT BROCHURE
- 2. 11 4000-2 EQUIPMENT ROUGH-IN PLANS
- 3. 11 4000-3 CUSTOM FABRICATION
- 4. 11 4000-4 SERVING COUNTER
- 5. 11 4000-5 EXHAUST HOODS
- 6. 11 4000-6 COLD STORAGE ASSEMBLY
- 7. 11 4000-7 REFRIGERATION
- 8. 11 4000-8 BEVERAGE MERCHANDISER
- D. Package One (1) requires both submittals: Brochure and Rough-in plans. If not sent together, submittal will be rejected.
- E. All submittals will be notated in RED by Foodservice Design Professionals (FDP), architect, and general contractor to be colored per their direction.
- F. If hard copy submittals are required, Kitchen Equipment Contractor to furnish all hard copies as required to the specified trades.
- G. If discrepancies, missing information, or incorrect information occur within the documents, Kitchen Equipment Contractor to seek clarification or clearly notate on submittals the need for further direction. Kitchen Equipment Contractor is to bid the higher of the discrepancy. *Refer to Section 1.3 SCOPE OF WORK: Subsection D.*
- H. Brochure Format (for regularly manufactured equipment and components):
 - 1. Front and rear protective cover with labelled project name.
 - 2. Brochure index: Indicate functional Area/Room number, item number, quantity, description, and manufacturer.
 - 3. A separate flysheet for each component or item of equipment, indicating item number, name, quantity, manufacturer, optional equipment, modifications, special instructions, and utility requirements. An item of equipment or assembly containing more than one buyout sub-assembly or component shall have the secondary item listed in parenthesis beside the primary item name. For example: Serving Counter (hot food well).
 - 4. Catalog specification sheet with all specified options notated on specification sheet and manufacturer's drawing.
- I. Shop Drawings (Rough-In Drawings):
 - Separate drawing sheets: same size as Contract Drawings (Contract Drawings are not to be traced or reproduced). Submittal drawings are to be provided by Kitchen Equipment Contractor and not reproduced from Contract Documents. Any reproduced submittal drawings will be rejected.
 - 2. ½" scale drawing of fixed/movable food service equipment and prefabricated Cold Storage Assemblies with itemized schedules.
 - 3. Special Conditions Drawings, sizing and locating the following conditions:

- a. Slab depressions, cores, sleeves, or block-outs (cold storage assemblies, drain trenches, piping, etc.)
- b. Concrete or masonry platforms
- c. Pipe sleeves or roof jacks
- d. Wall-openings or block-outs for pass-through equipment, recessed control panels, in-wall fire-protection system components, etc.
- e. Blocking grounds or anchor plates required in walls for equipment support/attachment
- f. Above-ceiling hanger assemblies for support of exhaust hoods, utensil-racks, etc.
- g. Access panels in walls or ceiling for service of equipment
- h. Ceiling pockets or recesses for unusually high equipment
- i. In-wall carriers for wall-hung or cantilevered equipment
- 4. Electrical Rough-In Drawing
- 5. Plumbing and Mechanical Rough-In Drawing
- 6. Required information:
 - a. All fixed and movable food service equipment shown on Contract Drawings
 - b. All prefabricated Cold Storage Assemblies and Conveyor/Dishtable Assemblies shown on Contract Drawings
 - c. All general-use and convenience utilities or services indicated on Contract Drawings, including those required by or connected to equipment or devices not in this Section
 - d. All Rough-In Drawings: Fully dimensioned from engineering benchmark (column lines, when provided) and finished-room surface to point of stub-up through floor and stub-out through wall or ceiling for all mechanical, electrical, and plumbing services
 - e. Connection number/tag system and symbols: Identical to Contract Drawings
- J. Shop Drawings (Manufacturer's and Fabricator's):
 - 1. Sheet Size: Identical to Contract Drawings, drawn or plotted at ¾" scale for plan view and elevations; 1½" scale for sections and construction details
 - 2. Included information: Item number, name, and quantity
 - 3. Construction details, sections, and elevations to reflect requirements of the Specifications and Drawings
 - 4. Indicate adjacent walls, columns, and equipment.
 - 5. Indicate plumbing and electrical schematic drawings for equipment such as: conveyors, waste systems, self-cleaning exhaust hoods, exhaust hood fire protection systems and fabricated fixtures with single electrical or plumbing connection.
 - 6. Mechanical or electrical operating components or products integrated into a fabricated fixture: ventilation and service access required or recommended by the manufacturer, including panel size and location to permit easy lubrication, adjustment, or replacement of all moving parts.

- K. All equipment and engineering rough-in plans sheet numbers are to match the contract documents. All equipment item no.'s and engineer item no.'s located on the schedules are to match the contract documents. All engineering requirements are to be updated as required to accommodate the provided equipment and/or match the contract documents. The Kitchen 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 costs associated with equipment substitution.
- L. Foodservice Design Professionals (FDP) drawings and schedules are not to be copied in any way. Any replicated drawings of Foodservice Design Professionals (FDP) will be rejected.

1.10 SERVICE MANUAL

- A. Three copies bound in 1½" hardback, three-ring binders (as many volumes as required by scope of project) with same data as brochure at completion of installation (Refer to "Submittal Data"). Provide separate service manuals as required for each independent area within the project scope (Main Kitchen, Culinary, Concession, etc.).
- B. Each Volume: Section for maintenance of finish materials (e.g., stainless steel, plastic laminates, FRP, Plexiglas, etc.).
- C. Catalog specification sheet and/or manufacturer's shop drawings.
- D. Each Volume: Index of items, manufacturer's operating/maintenance information, replacement parts data, list of all product warranties and price lists. Provide the name, title, and address of personnel at each respective manufacturer and service personnel to be contacted for spare/replacement parts and service after warranty period.
- E. To the extent possible, provide two copies of manufacturer's video instructional cassettes for operating, maintenance, and service of equipment.
- F. Internally subdivide binder contents with permanent page dividers, logically organized by equipment item number or manufacturer name, with tab titling clearly printed under reinforced laminated plastic tabs.
- G. Electronically submitted manuals are required to follow the same formatting requirements listed above.
- H. Service Manual to be provided to owner PRIOR to kitchen equipment demonstration.

1.11 VERIFICATION AND COORDINATION OF PROJECT / DATA

- A. Utilities Rough-in Drawings and field verifications to be completed within four weeks after receipt of notice-to-proceed. Review Contract Drawings and Submittal Data for accuracy and completeness and notify Architect of conflicts and proposed adjustments. Coordinate work with other sub-contractors.
 - 1. KEC to provide on-site field verification of all underground utilities prior to pouring of concrete for capacity and location, coordinate with General Contractor. Submit review to Architect and General Contractor. If any rough ins need to be relocated, KEC will compensate other trades for required relocation.
 - 2. KEC to provide on-site field verification of all other utility connections and locations, coordinate with General Contractor. Submit review to Architect and General Contractor.

B. On-Site Inspection Reports

1. Prior to concrete pour: Kitchen Equipment Contractor to submit a copy of the report below to the Architect, General Contractor, and Foodservice Design Professionals (FDP) within 24 hours of the inspection. Form to be submitted is contained within these General Specifications.





On - Site Inspection Report

Prior to Concrete Pour

Inspection Date Project Name
Project Location
Inspector's Name Company
Inspector's Contact Number Email
Architectural Firm Contact
Architect's Contact Number Email
General Contractor PM
G.C. Contact Number Email
Foodservice Consultant Foodservice Design Professionals, LLC PM
Contact Number 281.350.2323 Email
An on-site Inspection to verify the location of UNDERGROUND utilities was conducted on this date. The following conditions were observed and brought to the attention of the General Contractor. (KEC is to provide a written description and copy of the Utility Plan indicating the corrective action required). 1. What difficulties, if any, were encountered?
Inspector's Initials

This Inspection Report is the responsibility of the Kitchen Equipment Supplier and the General Contractor. Coordination between the two parties is mandatory.

Neither the Architect nor FDP need to be present at any of the inspections.

EMAIL A COPY OF THIS REPORT AND ANY ADDITIONAL INFORMATION TO THE ARCHITECT, GENERAL CONTRACTOR AND FOODSERVICE DESIGN PROFESSIONALS, LLC.



On - Site Inspection Report

Prior to Delivery of Equipment

Project Location Project Name
Inspector's Name Company Inspector's Contact Number Email
Architectural Firm Contact Architect's Contact Number Email
General Contractor PM G.C. Contact Number Email
Foodservice Consultant Foodservice Design Professionals, LLC PM Contact Number 281.350.2323
An on-site Inspection to verify the location of INSTALLED utilities was conducted on this date. The following conditions were observed and brought to the attention of the General Contractor. (KEC is to provide a written description and copy of the Utility Plan indicating the corrective action required).
1. What difficulties, if any, were encountered?
Inspector's Initials

This Inspection Report is the responsibility of the Kitchen Equipment Supplier and the General Contractor. Coordination between the two parties is mandatory.

Neither the Architect nor FDP need to be present at any of the inspections.

EMAIL A COPY OF THIS REPORT AND ANY ADDITIONAL INFORMATION TO THE ARCHITECT, GENERAL CONTRACTOR AND FOODSERVICE DESIGN PROFESSIONALS, LLC.

- C. 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 and locations
 - 2. Refrigeration Systems (compressor, condenser, and evaporator) capacities/sizes, quantities, and refrigerant piping distances/sizes
 - 3. Exhaust Hood Fire Suppression Systems (nozzle locations, air handler and fuel interlocks, piping/distance limitations)
 - 4. Locations of Vacuum Breakers
 - 5. Conformance of Refrigerated Components/Equipment with HACCP Guidelines (e.g., salad/sandwich pans, upright/open refrigerator cabinets, salad bars) with HACCP Guidelines
 - 6. Gas, water line sizes and manifold configurations
 - 7. Diameter and length of flexible connector lines for fixed/movable gas appliances
 - 8. Fabricated Equipment load center panels (individual and total amperage calculations and circuit balance)
 - 9. ADA compliance of workstations, service positions, passageways, etc.
- D. Ceiling mounted appliances/fixtures: Verify and coordinate dimensions/location of support framing/hangers with General Contractor. All material and installation below 12'-0" AFF: Section 11 40 00.
- E. Dimension Responsibility: Obtain actual or guaranteed measurements for proper fit of equipment. All dimensions indicated in Contract Documents are approximate and are as accurate as can be determined at the time. Field-check all horizontal/vertical measurements and conditions at the building prior to fabrication or delivery of equipment and notify the Architect of all conflicts or deviation from the dimensions shown.
- F. Checking Dimensions at Site: Before ordering any materials or doing any work, verify all measurements of the building and be responsible for the correctness of them. No extras will be allowed for variations from drawings in existing conditions or for work performed under this contract. Any discrepancies found shall be submitted to the Architect for instructions before proceeding.
- G. Scheduling to Fit Openings: Should it become necessary to schedule construction of walls or partitions prior to delivery of fixed equipment, the equipment must be fabricated for passage through finished openings. Maintain close contact with the project and be cognizant of all conditions, including vertical handling limitations within the building (elevator cabs or openings, stairs, etc.) and possible hoisting requirements. Coordinate all procedures with General Contractor and Project Team.
- H. Refrigerated and Dry Storage Areas: Verify and coordinate dimensions to accommodate scheduled modular shelf sections. Notify Architect of variance between the Contract Documents and actual conditions.
- I. Color/Pattern Selections: Submit selection samples of solid polymer products, plastic laminate, paint or stain finishes and vinyl-coated surface material of equipment as selected by Owner.
- J. Movable Equipment Interface: Rolling stock (pan racks, carts, dollies, dish/tray/rack dispensers) required to fit through or into fixed equipment (roll-in refrigerators, counter bodies, etc.) is to be

- reviewed and coordinated for compatibility at time initial of shop drawing submittal. Indicate conflicts and proposed adjustments.
- K. Relocation of Work: Relocate or re-route work as required to coordinate related items free of charge if no extra work is involved.
- L. Contractor must provide an Itemized Schedule of Values that correlates with the food service equipment item numbers for verification prior to submittals being submitted.

1.12 EQUIPMENT FURNISHED / INSTALLED BY OTHERS

- A. Obtain and coordinate utility requirements of Owner-Furnished/Owner-Installed (OF/OI) equipment with the building utilities and rough-in drawings/provisions.
- B. Coordinate physical data of OF/OI appliances or equipment and incorporate information into Submittal Drawings. Vendor- or Purveyor-Furnished equipment (e.g., coffee/tea equipment): same as OF/OI.

1.13 WORK INSTALLED BUT FURNISHED BY OTHERS

- A. Coordinate delivery/installation schedule of Owner-Furnished/Contractor-Installed (OF/CI) equipment with Owner not less than ninety (90) days before equipment requirement.
- B. Obtain and coordinate utility requirements of OF/CI equipment with the building utilities and rough-in drawings/provisions.
- C. Receive at jobsite and fully incorporate into installation procedures as if furnished under this Section.

PART 2 - PRODUCTS

2.1 FABRICATED FIXTURES MATERIAL / COMPONENTS

- A. Stainless steel sheets or shapes: 18-8, Type 302, polished to 180 grit No. 4 finish
 - 1. Stainless steel joints and seams: Heli-arc welded, free of pits and flaws, ground smooth and polished to No. 4 finish
 - 2. The "grain" direction of horizontal stainless-steel surfaces: Longitudinal, including the splash back. The polishing procedure at right-angle corners of fixtures shall provide a mitered appearance.
- B. Galvanized Iron Sheets: Armco copper bearing Zinc Grip or Zinc Grip/Paint Grip
 - 1. Galvanized iron joints and seams: Arc-welded, free of pits, flaws, and ground smooth
 - 2. Galvanized sheets or shapes: Washed with mineral spirits and painted with Rust-Oleum gray semi-gloss enamel
- C. Sound Deadening: Schnee Butyl Sealant ½" wide rope positioned continuously between all framemembers or contact material and underside of stainless-steel surface (sinks, tabletops, food wells, over shelves and undershelves). Tighten stud-bolts for maximum compression of sealant and trim excess
- D. Plastic Laminates: Color/pattern selected by Architect, in 1/16" thickness for flat surfaces: 1/32" thickness for radiused surfaces. Plastic laminates and adhesives must be NSF approved (Standard No. 35)

E. Solid Polymer products: Color/pattern/material as selected by Architect in thickness as specified. Solid Polymer and adhesives must be N.S.F. approved (Standard No. 51)

F. Casters:

- 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 Verti-Lock brakes. All casters: B-7" rolling bumpers with stainless steel top discs.
- G. Cutting Boards: 1/2" thick Read Products, Inc. "Richlite" cutting board, size as indicated
- H. Identification Plates, Labels, Tags:
 - 1. Prohibited Information: Names of suppliers, fabricators, and contractors
 - 2. NSF Labels: Required on all pieces of equipment
 - 3. Required Information: Function or purpose of controls such as display light switches, food warmer controls, etc.
 - 4. Plate Construction: Engraved phenolic plastic, secured to equipment with epoxy cement or stainless-steel screws. Furnish samples.

2.2 PLUMBING / MECHANICAL REQUIREMENTS

A. Plumbing Fittings and Components: Furnished under this Section as follows:

Note: Fitting and components described in Items 1, 2, 3, 4 and 5 are furnished loose by 11 40 00 for final installation and connection by Division 22.

- 1. Control valves, appliance pressure regulators for water, gas and steam, and vacuum breakers: wherever required on food service equipment (chrome-plated where exposed)
- Faucets and drains with and without connected overflows (unless otherwise indicated) for all sinks
- 3. Specialty food service water-fill faucets, hose bibbs or hose assemblies indicated in drawings/specifications
- 4. Wade Model No. W-10 Shock-Stop shock absorbers for all food service equipment with quickopening or solenoid-operated water valves
- 5. Dormont Stainless Steel Water Quick Disconnect hose, diameter per water connection size requirements, with Safety Quick safety fitting, w/coiled restraining device, full port ball valve, antimicrobial coating, lifetime warranty
- 6. 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 (e.g., cold pans, hot food wells, refrigerator/freezer coils not equipped with condensate evaporators) furnished and installed by Division 22. Drains: painted with aluminium paint where exposed, type "K" copper where concealed. Div. 22 to ensure minimum air gap of 1" and not less than twice the effective opening of the indirect waste pipe, per code. Div. 22 to ensure all drain lines are centered over floor sink grate openings and no water splashes on floor.
- 7. Piping brackets and supports beneath fabricated equipment

- 8. Closed Base Bodies: Removable 18-gauge stainless steel closure panel at plumbing penetrations, under top
- 9. Control valves on Open Base fixtures: Mounted on 14-gauge stainless steel gusset-shaped panel with 3½" setback from countertop edge/rim to face of control handle.
- 10. 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.
- 11. Provide filtration option as shown on contract documents (a, b, c, or combination thereof):
 - a. In-line Water Filter System:
 - i. Everpure System filters for coffee/tea brewers, icemakers, water chillers, convection steamers and beverage systems. Sized per manufacturer recommendation.
 - b. Remote Central Water Filter System
 - c. Remote and/or In-line Reverse Osmosis system
- B. Gas-Heated Equipment Fittings and Components: Furnished under this Section as follows:
 - 1. Fixed Equipment: Dormont MFG brand "KITCF" Series gas hose kit with Quick Disconnect fitting at appliance. Approved equal: T&S Brass. Diameter per fuel volume/connection size requirements. Gas valve diameter size per fuel volume/connection size requirements.
 - a. Restraining device: Heavy duty steel cable, fastened to equipment and walls, 3" to 6" shorter than equipment connector length
- C. Final Plumbing Connections Provisions:
 - 1. Fabricated equipment containing components, fittings and/or devices indicated on food service connection 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.
 - 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
- E. Refer to Section 1.4: OTHER DIVISIONS/CONTRACTORS RELATED WORK; Sub Sections E. Plumbing and F. Mechanical for additional information.

2.3 FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS

- A. Install complete with all refrigerants, oil, dials, dehydrators, gauges, controls required for the proper operation of the system.
- B. Self-contained or factory-installed compressors: Check and adjust to proper operating temperature prescribed by FDA/HACCP.

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.
- C. 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.
- B. Electrical Fittings and Components: Furnished under this Section as follows. Coordinate food service equipment loads, voltage and phase with building system and confirm any existing or OF/OI equipment requirements.

C. Cord and Caps:

- 1. Coordinate all food service equipment cord/caps with related receptacles.
- 2. All 120, 120/208 and 208 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. Disposer controls recess-mounted in wall: External fittings and accessories removed from enclosure and furnished with 16-gauge stainless steel perimeter angle flange with welded corners. Install control at 4'-0" AFF to bottom of enclosure.

- 3. Disposer controls recess-mounted in counter-splash risers: External fittings and accessories removed from NEMA 4 enclosure and furnished with 16-gauge stainless steel perimeter angle flange with welded corners. Install control at 3'-0" AFF to bottom of enclosure. Provide panel with 60" long coil of Seal-Tite electrical conduit, from bottom of control panel for final field connections under Division 26.
- 4. 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.
- 5. 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.
- 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 to be typewritten on circuit schedule in load center door (number corresponding breaker/device) with enclosed schematic wiring diagram of fixture components.
- 8. All receptacles to be pre-wired to cord and plug assembly and routed through over shelf post at all island equipment locations, unless specified otherwise.

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. LED Display Light: Install 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. Cold Storage LED Light Fixtures: Furnished by Section 11 40 00, final installation by Div. 26. All electrical wiring and conduit, provided by Div. 26, electrically connected through the Vapor Proof light fixture base connection, located on the interior door header. All Conduit to be EMT Watertight. Door frame wiring stubs out top of panels 8" in flexible conduit for final connection by electrical contractor. All horizontal conduit: below ceiling panels. All lighting fixtures to be wired from inside the assembly. No penetrations through the ceiling panels. Seal sleeved penetrations airtight at both sides of panel. KEC responsible for verifying all penetrations are sealed by trade contractors.

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 Connection 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
- Lamps: in all food service equipment containing light fixtures. Refrigerator or heated cabinets: All
 exposed LED lamps above or within a food zone: Shat-R-Shield lamps or standard lamps, sleeved with
 end caps.

J. Refer to Section 1.4: OTHER DIVISIONS/CONTRACTORS RELATED WORK; Subsection F. Division 26 (Electrical) for additional information.

2.6 CUSTOM - FABRICATED / ASSEMBLED UNITS

A. Mechanical or electrical operating components or products integrated into a fabricated fixture: Ventilation and service access required or recommended by the manufacturer. The service access panel(s) size and placement are to permit easy lubrication, adjustment or replacement of all moving parts and is to be indicated on fabrication shop drawings.

2.7 BAKER TABLETOPS (Unless specified otherwise)

- A. 14-gauge 304 S/S top with 2" square turn down at front, 6" high enclosed splash at two (2) sides and rear. Brace same as "Counter/Tabletops."
- B. 11/4" x 6" high integral coved riser at rear and ends unless indicated otherwise on drawings.
- C. 16-gauge stainless steel flour-trough at free long sides, secured to underside of top. Trough: 3" diameter with eased edges/corners.

2.8 COUNTER / TABLETOPS

- A. 14-gauge stainless steel; all free edges turned down 2" with 3/4" tight hem at bottom. Free corners: rounded on 3/4" radius.
- B. Marine edges: Turned up ½" on 45° angle and turned down 2" with ¾" tight hem at bottom.
- C. Cafeteria serving countertops at hot food stations: Full-length x 3½" x ½" high raised rail at (customer's) front side with 45° integral turndown to counter surface.
- D. Tops abutting high fixtures or walls: Cove up specified height and slope back 1½" at top on 45° angle; 2½" slope where piping occurs. Turn down 1" at rear of splash and close ends to bottom of top turndown. Secure splash turndown to wall with 4" long 14-gauge stainless steel "Z" clip anchored to wall, 36" OC.
- E. Freestanding tables and all serving counter splash-risers: Turned back on 90° angle with 1" turndown at rear.
- F. Brace tops with rigid-welded 1½" x 1½" x 1/8" galvanized steel angle frame at perimeter with cross bracing 2'-0" OC maximum. Provide 4" x 4" x 12-gauge stainless steel triangular pads where leg gusset welds to frame. Paint entire frame with Rust-Oleum gray semi-gloss enamel. Angle frames: secured to underside of top surfaces with ¼" studs welded 9" OC maximum with chrome-plated washer, lock washer and cap nut. 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: 1½" overhang at free sides of underframe or Closed Base Body.
- H. Mockett Model No. SG5-26 chrome-plated/plastic grommet assembly or integrally welded stainless-steel flange or inverted gusset where service utilities or support posts penetrate or abut tops, ground and polished to match top. When conditions permit, provide a 1" x 1½" rectangular opening in the backsplash for service utilities in lieu of piercing the horizontal surface. Install stainless steel splittubing at raw-edge of opening.
- 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: 3/16" high raised die-formed edges.

- K. All top openings for pans or inserts: 20-gauge stainless steel, watertight liners, 8½" deep, secured to underside of countertop.
- L. All "built-in" and "drop-in" counter equipment/appliances to have framing members at perimeter of opening.
- M. Scrap Basket: 18-gauge stainless steel construction 6½" x 6½" x 21¾" long. Top of container: 5/8" wide x ¼" high full perimeter flange with ¼" diameter stainless steel rod bail handle. Interior vertical corners coved on ½" radius. Countertop: Fitted with 6¾" square die-stamped opening.

2.9 COLD PANS

- A. 14-gauge stainless steel with 3/4" coved interior welded integrally to countertop with 3/16" raised edge at perimeter of opening. Depth of Cold Pan: NSF 7 compliance.
- B. Slope bottom to required quantity of Component Hardware Model No. E16-4021 drain fittings at 48" OC maximum. Sleeve through insulation at drain fittings and extend common drain line into utility compartment for indirect waste connection.
- C. ½" OD copper refrigerant lines in serpentine patter, 1½" OC flattened for maximum contact. Secure tubing to underside of ¼" thick aluminium "distribution plate" installed tight to underside of frost plate area and apply cold-conductive mastic to all surfaces.
- D. Component Hardware Model No. E16-4021 drain fittings at 48" OC maximum, sleeved through insulation with common drain line extended into utility compartment.
- E. Heat Cable: Low-wattage, full-perimeter, below countertop at edge of depression. Secure with "Z" clips, 9" OC and interwire with compressor switch for simultaneous operation.
- F. Enclose sides and bottom of pans with airtight 18-gauge galvanized jacket and pack with 2" fiberglass insulation set in mastic.
- G. Compressor: Size as indicated or required to accommodate size of cold pan. Locate compressor in compressor compartment below unit or as indicated on drawings.
- H. Sectional 16-gauge stainless steel perforated false bottom (1/4" holes, @ 3/4" OC). Turn down 11/2" all sides, weld corners and provide finger rings. False bottom sections: 24" long maximum.

2.10 DRAWERS

- A. Stainless Steel Liners: Component Hardware Model No. S80-2020 (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-panel 16-gauge stainless steel drawer front with full-length recessed pull at top (similar profile as Garcy Model No. R-1060) 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 Model No. S52-2020 self-closing slides, with Delrin bearings, 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 with Delrin bearings.

- E. Drawer enclosure in an Open Base Fixture: 18-gauge stainless steel flanged out at top for attachment to underside of tabletop. 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 ³/₄" deep offset in front of enclosure and 2½" from underside of tabletop for flush-fitting appearance.
- F. Drawer enclosure on freestanding fixture: Full depth of table framing.
- G. Drawer enclosure in a Closed Base Fixture: Completely partitioned from adjoining area. Drawer front: Flush fitting with face of body
- H. Drawer Liners other than tool/utility: Bread Drawer: Component Hardware Model No. S83-2020; Refrigerated Drawer: Component Hardware Model No. S81-1520 stainless steel liner
- I. Cash Drawer: Integral stainless-steel body, 3" deep

2.11 FOOD WELLS (UNLESS SPECIFIED OTHERWISE)

- A. Food Warmer Controls: Remote-mounted in sloping recessed apron panel. Control panel is recessed 2½" from bodyline at top of 60° slope, 1" at lower edge. Terminate slope angle 2½" below countertop. Mount panel on concealed piano hinge at bottom edge; secure with screws at upper corners.
- B. Manifold all warmer drains and extend to within utility compartment for indirect waste connection. Install valve in drain line and extend handle through compartment door.
- C. Removable 18-gauge stainless steel closure panel at underside of warmers.
- D. 14-gauge stainless steel plate/utensil shelf full-length of hot food station unless noted otherwise: 10" below countertop x 9" deep, with rear panel coved up to underside of countertop; end panels turned up square. Front of shelf: Turned down 1½" and returned under for closure panel attachment.
- E. Food wells: Hatco Model No. HWBIBRT-FULD insulated food warmer (1200 watts, 208 volts, single phase) secured to underside of 12" x 20" die-stamped countertop openings with thermal breaker mastic rope applied at perimeter of food well flange.
- F. Soup Warmers: Hatco Model No. HWB-11QTD soup warmer secured to underside of 11" diameter die stamped countertop opening with thermal breaker mastic rope applied at perimeter of soup well flange. Maximum allowable temperature of countertop at contact surface: 120°F. Each warmer: Equipped with one 11-quart stainless steel round insert and slotted cover.

2.12 SINKS

- A. 14-gauge stainless steel; all interior corners (horizontal/vertical) coved on ³/₄" radius. 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 overflow): Score and slope sink bottom ½" to die-stamped opening fitted with Fisher 22306 twist waste valve 3 1/2" x 2" with overflow and tailpiece. 14-gauge stainless steel bracket: Welded to sink bottom for drain stem with 1½" handle clearance.
- D. Where sinks are installed in fixture with Closed Base Body, provide a Fisher 22306 twist waste valve 3 1/2" x 2" with 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 with T & S Model No. BL-4740-1 guide bushing. Install on shortened drain stem, one T & S Model No. BL-4710-

1 remote control stem assembly only (length as required) with Model No. 113-L universal joint and white blank button. Set drain control handle in Cambro Model PSB-6 bowl with bottom omitted (dress raw edge) to permit passage of drain handle. Secure bowl in utility compartment door or body panel with clear silicone.

- E. When single-hole deck-mounted faucets are specified, install overflow fitting in sidewall of sink compartment and provide ell-fitting in connecting tubing.
- F. Flush Covers when specified: 1/2" thick Read Products, Inc. "Richlite" cutting board, size as indicated. Support clips: ½" stainless steel rod 2" long, formed at 45° with two ¾" leg ends (½" 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 ½" 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.

2.13 TRAY SLIDES (UNLESS OTHERWISE SPECIFIED)

- A. Tray slides: 12" wide, solid 14-gauge stainless steel turned up 2" at rear behind countertop turndown; turned down 4" at front and free ends, unless otherwise indicated.
- B. Three ¼" high die-formed inverted "V" ridges at 4" OC, 2" from leading edge, terminating 2" from ends of tray slide with tapered ridge-ends.
- C. Ridges formed on radius: Equal-length segments with 2" separation between chords.
- D. Secure tray slides to counter-top/body frame, same as "Countertops." Enclose exposed underside of tray slide with 18-gauge stainless steel.
- E. When indicated, project tray slides 2" beyond serving countertop and return the full width of serving counter at free ends.
- F. All tray slides to be provided and mounted per ADA requirements.

2.14 DISHTABLES

- A. Soiled/clean dishtable: 14-gauge stainless steel; free edges coved up 3" with 1½" diameter rolled rim and bullnosed corners.
- B. Edge of dishtables next to high fixtures or walls: Coved up 10" and sloped back 1½" on 45° angle; 2½" slope where piping occurs. Turn down 1" at rear of splash and secure to wall with 4" long 14-gauge stainless steel "Z" clips anchored to wall, @ 36" OC.
- 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" OC.
- D. Cove all interior corners (horizontal/vertical) on 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 ¼" studs welded 6" OC maximum, with chrome-plated washer, lock washer 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: Chicago Model No. 305VBRCF; mounted on 12-gauge stainless steel flange or inverted gusset bracket with 3/8" stainless steel rod hose hanger.
- H. Extend underbracing members to wall, turn down 6" and anchor to wall when specified to be mounted on leg/bracket assembly.
- I. Paper-Drop Opening: 9" square with 4" integral chute having hemmed bottom edge. Slope dishtable top 1" toward opening, forming a 16" square tapered deposit point.
- J. Accessible Tray-Drop Opening: 10" x 18" with integral 16-gauge stainless steel seamless chute sloped on 45° angle toward center of mobile soak sink position.
- K. All dishtables with a Conveyor Type Dishmachine must have a table limit switch provided by Manufacturer and installed by Division 26. Wiring must be concealed within dishtable fabrication.

2.15 DISH / TRAY DEPOSIT ASSEMBLY

- A. 14-gauge stainless steel deposit shelf, size as indicated. Extend shelf through opening, flush with public side of partition, height as required by local code authorities. Turn shelf down 1" at front with ¾" return at bottom (either scribed into partition or forming reveal). 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. Modify rolled rim at the operator's side of the tray drop window to have a 3" rolled rim.
- B. 18-gauge stainless steel window frame with perimeter flange channel-formed 1" x 3/4" at both sides of wall. Weld all corners of frame and install with concealed attachment. Align/abut one jamb of frame with end splash of conveyor slider pan or dishtable whenever adjacent.

2.16 UTENSIL - WASH COUNTERS

- A. 14-gauge stainless steel; all free edges coved up 3" with 1½" diameter rolled rim and bullnosed corners.
- B. Edges of utensil-wash counters next to high fixtures or walls: Coved up 10" and sloped back 1½" on 45° angle; 2½" slope where piping occurs. Turn down 1" at rear of splash and secure back splash to wall with 4" long 14-gauge stainless steel "Z" clip anchored to wall @ 36" OC. Vacuum breaker pockets: 4" long square turnback sections, aligned with slope break line.
- C. Exposed Rear Splash: 16-gauge stainless steel finished panel from top of splash to bottom edge of rolled rim with welded vertical joint at end of splash and ½" turnback at bottom of panel. Secure panel with concealed attachment and install bracing 24" OC.
- D. Cove all interior corners (horizontal/vertical) on 3/4" radius and slope tables 1/8" per foot, maintaining level crown.
- E. Brace utensil-wash counters 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 ¼" studs welded 6" OC. maximum, with chrome-plated washer, lock washer 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. Extend underbracing members to wall, turn down 6" and anchor to wall when specified to be mounted on a leg/bracket assembly.
- H. Hose Bibb: Chicago Model No. 305VBRCF; mounted on 12-gauge stainless steel flange or inverted gusset bracket with 3/8" stainless steel rod hose-hanger.

2.17 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: 3/4" turndown at front and ends with 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 Model No. M75-1002 stainless steel hinges (notch door/jamb at hinge location)
 - 2. Component Hardware Model No. 35-2000 Concealed Magnetic Catch
 - 3. Component Hardware Model No. D30-4780 lock in upper free corner of door
- 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°, ½" spacing. Perimeter channel-formed frame: 1½" x 1"
 - 2. 45° x 1" x ½" x opening width plus ½" 18-gauge stainless steel louver
 - 3. Tack weld tab of louver flange to back panel of door.
- E. Drain handle opening: 6" diameter hole through double pan to accommodate Cambro Model No. PSB-6 Bowl
 - 1. Secure bowl to door panel with clear silicone.
 - 2. Omit bottom of bowl. Dress raw edges of opening for passage of drain handle.
 - 3. Exposed insulation at penetration of door pan: Painted black
- F. Sliding Doors: fabricate same as Paragraph "A."
 - 1. Aluminium Sliding Door Track: Component Hardware Model No. B57-0000 Series, length as required. Secure to angle frame at top of underside.
 - 2. Front/rear door sheaves: Stainless steel 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.

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

2.18 CLOSED BASE BODIES

- A. Frame: Rigid-welded 1½" x 1½" x 1/8" galvanized steel angle forming a continuous structure around the top and bottom perimeters of the fixture, a post at each corner, studs spaced 48" OC maximum. Top of frame is cross-braced with 1½" angles, 2'-0" OC maximum.
- B. 18-gauge stainless steel panels and trim with concealed attachment. All seams: Welded, ground and polished.
- C. Exposed Vertical Corners: Rounded on ¾" radius. Closed Base Bodies adjacent to walls or fixtures: square corners.
- D. Vertical and horizontal channel members at shelf interior or drawer enclosures, such as corners and center mullions: Closed and sealed.
- E. 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.
- F. Closed Base Bodies not set on platform: Component Hardware Model No. A54-2-6, 6" legs spaced 4'-0" OC maximum.

2.19 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 Garcy Model No. R-1060) with closed ends. Channel-formed horizontal pull: 3/4" 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. Access Doors Louver: Full-height, with 1½" x 1" x 18-gauge stainless steel channel-formed frame with welded corners. 18-gauge stainless steel louver. Submit sample of design for approval.

2.20 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 (similar profile to Garcy Model No. R-1060) with closed ends. Channel-formed horizontal pull: ¾" 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.

2.21 UTENSIL RACKS

- A. Rack: ¼" x 2" 300 series stainless steel flat bar with No. 4 finish, fully welded and formed to match shape shown on drawings. Lowest band: 7-6 AFF, unless otherwise indicated.
- B. Ceiling Mount Supports: 1-5/8" diameter 16-gauge stainless steel tubing from band to 18" above ceiling. Anti-sway bracing above ceiling: 1½" Unistrut members. Tubing penetrations at ceiling: Component Hardware Model No. A16-0206 stainless steel gussets.
- C. Table Mount Supports: 1-5/8" diameter 16-gauge stainless steel tubing extended thru countertop. Secure to closed base framing or cross rail/undershelf on open base fixture. Tubing penetrations of countertops: integrally welded stainless steel inverted gusset.
- D. Utensil Rack Hooks: Component Hardware Model No. J77-4401 stainless steel hooks spaced 8" OC maximum.
- E. Electrical Receptacle: NEMA No. 5-20-R or as noted. Mount in fully welded 3½" x 5½" x 3" 14-gauge stainless steel enclosure with ½" radius corners. Stainless steel cover plate to fit specified receptacle. Pre-wire thru tubular support for final connection above ceiling by Division 26.

2.22 CASHIER / SERVING COUNTERS

- A. Exterior Body Panels when specified: 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 (3) 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.
- E. Cashier counter to have 16-gauge s/s intermediate shelf, turned down 1 1/2" with tight hem at front. Cove up 2" at rear and sides. Brace undershelf with 1" x 4" 14-gauge stainless steel channel at longitudinal centerline. Provide outlet for power/data within body located above intermediate shelf. Provide cash drawer inserts per district standards.

2.23 OPEN BASE STRUCTURES

- A. 1-5/8" OD x 16-gauge seamless stainless-steel tubing legs bevelled at bottom. 11/4" OD cross rails fully welded (3600 smooth and polished) to legs at 10" AFF, OC.
- 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.

- D. Freestanding fixtures requiring utility connections: Component Hardware Model No. A10-0854 flanged feet at the fixture corners, anchored to floor with non-corrosive bolts.
- E. Table Bases: Maximum leg spacing of 6'-0" OC; dishtable and utensil wash counter bases at 5'-0" OC.
- F. Open Base equipment specified to be supported by brackets at the rear side only (not completely cantilevered): Tubular legs at front side only with Component Hardware Model No. A10-0854 flanged feet anchored to floor with non-corrosive bolts. Front-to-back cross rail: fitted into Component Hardware Model No. A20-0406 circular gusset secured to wall with non-corrosive bolts.

2.24 UNDER SHELVES

- 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. Open Base Structure specified to be supported by brackets at rear side only (not completely cantilevered): 16-gauge stainless steel turned down 1 ½" at free sides with tight hem at bottom edge. Notch all corners to fit tubular legs as required and weld from underside to completely fill gap, grind, and polish. Cove up 2" at rear ends, as indicated. Fill gap at front to back rail, grind, and polish. Brace undershelf with 1" x 4" x 1" 14-gauge stainless steel channel at longitudinal centerline between front to back rails.
- C. 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.
 - 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.

2.25 ANCHOR PLATES / WOOD GROUNDS

- A. Behind finish surface wherever building wall, partitions or ceiling construction will not accommodate direct attachment of equipment such as over shelves, 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 4000.
- B. Anchor Plates: Not less than 12" x 12" x ½" 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 3/4" 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". Cross bracing at 6'-0" OC maximum.

2.26 OVER SHELVES

- 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" raw at walls and sides with horizontal coved corner at rear. Round front corners of turn up on 34" radius.
- C. Where shelf width exceeds 12" width, reinforce with ½" x 4" x 14-gauge stainless steel closed hat channel full-length of shelf.
- D. Wall-Mounted Shelves: 16-gauge stainless steel brackets 48" OC maximum, set in 6" from ends.
- E. Freestanding Shelves: Where splash is required at free over shelves, turn up square 2" at ends, cove up at rear and hem tight to lower edge of front turndown. Weld exposed corners.
 - 1. Freestanding over shelves: 16-gauge stainless steel cantilevered brackets at rear of table; double-cantilevered brackets at center of table. Posts for cantilevered over shelves are 1-5/8" OD x 16-gauge stainless steel secured to underframe, 4'-0" OC. Ends of shelves: Secured to adjacent wall/fixture or mounted on 11/4" diameter stainless steel posts.
 - 2. Freestanding over shelves not on cantilevered brackets: 11/4" OD x 16-gauge stainless steel posts, each pair at 4'-0" OC maximum
- F. Baker Table Over shelves: Supported at 18" above top with 1¼" OD stainless steel tubular supports with channel shoe secured to risers.
- G. Glass/Cup Rack Over shelf at Dishtables: 14-gauge stainless steel with 1½" deep "vee" trough at free long sides with 1" tight hem at inside of trough. Provide a ½" 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" OD stainless steel tubing supports from structure above ceiling at front edge, 60" OC at each end.
 - 1. Install at both ends, ½" stainless steel drain-tube (connecting both vee-troughs) extended to dishtable surface through splash turnback.
 - 2. Rack-rest: horizontal full-length 1-5/8" OD stainless steel tubing supported at 10" OC above shelf (8" OC for double service shelf) by 11/4" OD stainless steel tubing with closed ends. Support tubing: welded, ground and polished, spaced 60" OC.
 - 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.

2.27 DRAIN TRENCH LINER / GRATING

- A. Liners: 14-gauge stainless steel in sizes as indicated.
- B. Interior of liners: 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" OC, fitted with 6" long welded tailpiece. Stainless steel safety chain: connected to basket strainer assembly and top of liner wall.

- C. 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.
- D. Underside of sloping portion of liner: 2" long "Z" clips
- E. Grating: IMC-TEDDY PFD-ADA removable fiberglass grating:
 - 1. 1" deep "I" bearing bars with 0.6" wide top flange
 - 2. Full perimeter frame, section quantities and sizes indicated
 - 3. Maximum of 2'-0" sections
 - 4. Grating bars to be spaced 0.4" apart per ADA requirements
 - 5. Grating to be two (2) equal sizes

2.28 WALL PANELS

- A. Wall Panels: 18-gauge stainless steel, double pan-formed ½" 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 joints all panels.

2.29 EXHAUST HOODS (Surface - Mounted Condensate)

- A. Hoods: Size/shape as indicated: 18" high at interior.
- B. Body: 16-gauge stainless steel, with all seams welded, ground and polished.
- C. Continuous condensate trough at perimeter: 3" x 1".
- D. Frame top of hood with 1½" angle iron assembly and suspend from structure above ceiling by ½" diameter steel rods, drawn tight against finished ceiling surface.
- E. Duct opening/collar as specified with stainless steel louvered grille over opening.
- F. Div. 22 to extend drain line to floor sink. Drain line to be silver painted. Div. 22 to ensure all drain lines are centered over floor sink grate openings and no water splashes on floor.
- G. ½" diameter steel hanger rods at 4'-0" OC maximum to be by Kitchen Equipment Contractor, but they are to be anchored to supporting structure (or slab) by the General Contractor in the locations required by exhaust hood shop detail.

2.30 EXHAUST HOODS (UNLESS SPECIFIED OTHERWISE)

A. Exhaust to be provided to meet all current local jurisdiction mechanical and energy code requirements. Kitchen Equipment Contractor to verify code requirements and coordinate with Division 23 and 26. Hoods over production equipment to be Type 1 with continuous capture. All Type 1 hoods to be 6' deep to ensure smoke/steam capture unless notated otherwise.

- B. Install fire suppression system(s) in all ventilators, specified in this section. Install in accordance with manufacturer's recommendations and applicable codes or standards. Submit installation certification form to Architect.
- C. Locate chemical cylinders as indicated on drawings and install piping to exhaust hood(s) in concealed manner. Set cylinders and cabinets at 7'-0" clear AFF unless noted otherwise. Provide polished chrome plated tubing piping/fittings, where exposed at cylinder location and at interior of exhaust ventilator. Exposed pipe threads in/above food zone not allowed. Submit schematic diagram of installation and confirm critical distances from cylinders to nozzles.
- D. Remote manual release located in path of egress from protected exhaust hood area. Kitchen Equipment Contractor to coordinate location with local Fire Marshal requirements prior to submittal review. All conduits to be recessed within wall, SURFACE MOUNTING WILL NOT BE ACCEPTED.
- E. Provide one (1) handheld Type 'K' 6-liter fire extinguisher per Ansul system, surface wall mounted.
- F. Required quantity and sizes of mechanically operated gas valves.
- G. Confirm interconnection of all equipment as required to ensure exhaust hood and fire suppression systems are completely operational and meet local jurisdiction code requirements.
- H. ½" diameter steel hanger rods at 4'-0" OC maximum to be by Kitchen Equipment Contractor, but they are to be anchored to supporting structure (or slab) by the General Contractor in the locations required by exhaust hood shop detail.
- I. Provide appropriate quantity of fire suppression systems as required by local jurisdiction code requirements.
- J. Double wall construction at ends. S/S where exposed.
- K. Refer to Section 1.4: OTHER DIVISIONS/CONTRACTORS RELATED WORK; Subsection E. Division 23 (Mechanical) for additional information.

2.31 HIGHLIGHTING

- A. Polish the following vertical surfaces to a No. 8 finish:
 - 1. Serving and display shelf turndowns
 - 2. Conveyor and dish/tray deposit station turndowns/frame
 - 3. Tray slide turndowns

2.32 SHOP / FIELD JOINTS

- A. Field joints: Least 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.
- D. 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" OC.
- E. Closed Base Bodies: Draw-type with hairline seam fully field-welded.
- F. Millwork: Plastic laminated material joints shall be doweled, glued and draw-bolted with fasteners.
- G. Solid Polymer: Surfaces drawn tight, filled, sanded, and finished to match adjacent surface.

2.33 PREFABRICATED COLD STORAGE ASSEMBLIES

- A. Assembly to be installed by Factory Authorized Installers only.
- B. KEC to provide a 1-year walk-in panel installation warranty. Panel installation warranty to cover labor and part replacement issues resulting from a failure to complete the following during installation:
 - 1. Walk-in panels to be installed in a square, plumb, and level manner.
 - Ceiling panels to be installed flush and tight to wall panels with the gasket material undamaged
 and to create a proper seal. Any signs of condensation at joints or walk-in walls should be
 reported to FDP and addressed immediately. Caulk at panel seams will not be an acceptable
 solution.
 - 3. All cam-locks should be engaged, and cam-lock covers in place.
 - 4. Any gaps under floor angle (due to shimming) must be sealed completely to the slab.
 - 5. All penetrations in ceiling or wall panels should be insulated and sealed by appropriate trade contractors and verified by KEC; including but not limited to: Light Fixtures, Refrigeration Lines, Sprinkler, Temperature Sensors, etc.
 - 6. Proper installation of the door systems should allow for the door to self-close and seal around the perimeter of the door opening and at the floor threshold.
 - 7. Final operation of the IC/IC+ control, door heaters and light switches should be confirmed upon completion of the electrical connections.
 - 8. Service issues, resulting from faulty installation will be covered under the walk-in panel installation warranty.
- C. KEC is responsible for overall install accuracy/quality and quality control of work performed regardless of installer or any field modifications due to building/construction conditions. KEC to provide Letter of Install Approval to Foodservice Design Professionals (FDP) upon completed install verifying that all items above have been inspected by the KEC for completeness and installed per manufacturer requirements. This letter will be required as part of the completion of the contract.
- D. Sectional Assemblies: Size/shape indicated on drawings; 9' AFF unless otherwise specified. Door locations/size: exactly as shown.
- E. Sandwich Panel Insulation: Class 1 Urethane with vapor barrier, 4" thickness with mature "U" factor of .030 or lower.
- F. 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.

- G. 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.
- H. Provide aluminium cove base at interior and exterior of exposed panels for all floor assemblies.

I. Floor Installations:

1. 4" Recessed Exposed Factory Floor Installation:

- a. 6 mil polyethylene sheets in slab recess with all joints lapped 6 inches and sealed to form a watertight seal.
- b. Level and square prefabricated perimeter and partition wall panels, anchored to slab recess. Protect exposed surface of panels.
- c. 4" commercial grade manufacturer's durafloor with diamond treadplate surface and marine grade plywood subfloor.
- d. 15# felt slip sheet over insulation with 6" lapped joints flashed up the height of finished floor base.
- e. 1/2" sand levelling bed by G.C.

2. **8-1/2" Recessed Floor Installation:**

- a. 6 mil polyethylene sheets in slab recess with all joints lapped 6 inches and sealed to form a watertight seal.
- b. Level and square prefabricated perimeter and partition wall panels, anchored to slab recess. Protect exposed surface of panels.
- c. 4" manufacturer's floor.
- d. 15# felt slip sheet over insulation with 6" lapped joints flashed up the height of finished floor base.
- e. 1/2" sand levelling bed by G.C.
- f. Concrete flooring and tile over insulation by Divisions 03/09.

3. 12" Recessed Floor Installation:

- a. 6 mil polyethylene sheets in slab recess with all joints lapped 6 inches and sealed to form a watertight seal.
- b. Level and square prefabricated perimeter and partition wall panels, anchored to slab recess. Protect exposed surface of panels.
- c. 4" manufacturer's floor.
- d. 15# felt slip sheet over insulation with 6" lapped joints flashed up the height of finished floor base.
- e. 1/2" sand levelling bed by G.C.

- f. Concrete flooring over insulation by Division 03.
 - i. Concrete mix: 5000 psi @ Freezers and 3000 psi @ Coolers
 - ii. No limestone or fly ash; fiberglass reinforced
 - iii. #3 rebar, set on 12" centers in both directions
 - iv. Center rebar vertically in wearing bed.
 - v. 10" high concrete 45° angled wall curb at interior perimeter per food service details.
- g. Diamond treadplate wall panels on interior and exposed exterior by 11 40 00. Refer to drawings for height. Coordinate diamond treadplate wall covering at interior with angled wall curb.
- h. Ventilation Pipe Requirements by G.C.:
 - Bottom perforated vent pipes to be #40 PVC on 6 ft. max centers open on both ends with thermostatic controlled fan on (1) end and perforated mesh on opposite end of fan at exterior of building.
 - ii. Vent pipes to turn parallel with exterior wall 180° turn down.
 - iii. Vent pipe openings to be held at 24" above grade or roof per design.
 - iv. Fans to be Grainger Manufacturer and sized per air flow needs. Air flow to be sized based on length and number of bends.
 - v. If no exterior wall is adjacent, vent pipes to route up and extend out past roof. Roof penetrations by Division 07.

4. Surface Mounted Factory Floor Installation:

- a. 4" commercial grade manufacturer's durafloor with diamond treadplate surface and marine grade plywood subfloor.
- b. 36" reinforced diamond treadplate internal ramp.
- c. 10-gauge stainless steel threshold to provide smooth transition to interior walk-in floor.
- J. Modularm Model No. 75LC 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 evaporator return airstream. System to include built in panic alarm. System to be interconnected to building's alarm system by Division 27.
- K. Unless otherwise specified, provide Cooper Atkins Temp Track smart system. Confirm all component model numbers for complete installation and operation.
- L. LED surface-mounted light fixture, in quantity/arrangement shown on drawings. Light fixtures to be perpendicular to coils. Light fixtures wired to interior and exterior temperature control panel. Light fixtures to be provided by Section 11 40 00 and installed by Division 26. Division 26 to seal all conduit penetrations at light fixtures. KEC to verify penetrations are sealed.

- M. Penetrations of Panels: To be sealed by factory installer and appropriate trade contractors, with Dow Corning 3-6548 silicone RTV foam, full depth of panel. Trim excess flush. KEC to verify all penetrations are sealed.
- N. Install closure panels and/or trim strips to building walls and ceiling with concealed attachment. Closure material: same as wall panels unless noted otherwise.
- O. Compartment Entrance Doors: 36" x 78" nominal clearance unless otherwise noted.
 - Mount hinged doors on three Kason Model No. 1346; polished chrome plated nylon cam-lift hinges.
 - 2. Swing doors as indicated on drawings.
 - 3. 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.
 - 4. 36" high x full-length diamond aluminium treadplate at front and rear of all hinged doors.
 - 5. 12" x 2" engraved phenolic plastic compartment identification sign in Architect's color selection with 1" letters, mounted above door window.
 - 6. 14" x 24" four-panel glass view window with heater and molded non-metallic inner and outer frame. Heater to be wired for continuous service.
 - 7. Padlock/key provisions in door latch with interior safety release.
 - 8. Provide one (1) heated pressure relief port for each cooler/freezer section with separate dedicated electrical circuits. Heated pressure relief ports in freezers to be wired for continuous service. Heated pressure relief port for freezer to be located on common wall of cooler/freezer assembly, unless specified otherwise.
- P. Provide refrigeration calculations and refrigeration alarm to meet local jurisdiction code requirements.
- Q. If air screens are specified above doors, manufacturer is to provide adequate blocking in panels to support air screens and pre-wired electrical connections. Installer to coordinate location of door closure as to not interfere with air screens.
- R. S/S trim above walk in to conceal manufacturers ceiling grid.
- S. Field-check all horizontal/vertical measurements and conditions at the building prior to fabrication or delivery of equipment.
- T. Cold Storage Assemblies to be installed by the PRE-APPROVED INSTALLERS listed below:
 - 1. QBR Refrigeration, 30083 Hwy 90 Blvd., Katy, TX 77493, Mr. Andy Spellins, 713-973-2875, andy.spellins@qbrsales.com
 - 2. Machine Ice, 8915 Sweetwater Ln., Houston, TX 77037, Mr. Will Weaver, 281-448-7823
 - 3. Coolers Inc., 6922 Alder Dr., Houston, TX 77081, Mr. Lee Mamone, 713-665-8886

2.34 COLD STORAGE REFRIGERATION SYSTEMS

A. Unit Coolers: specified quantity and model, ceiling-hung by ½" OD nylon bolts with stainless steel washers and nuts. Insert hanger bolts through plastic sleeve and seal penetration airtight.

- 1. Unit cooler drain fittings: positioned as indicated on drawings. Installation of cast tee-fittings on drain pan outlet with union and cleanout plug and extension of 1" Type K copper drain line through wall panel to air-gap fitting or floor drain under this Section.
- 2. Slope drain line ½" per foot, trap at exterior of assembly and turn down into drain. Manifold drain lines of adjacent compartments wherever possible.
- 3. Install drain line plastic sleeve through compartment wall, seal around drain line and install stainless steel escutcheon with setscrews.
- 4. Electric drain line heater cable (self-regulating 7 watts): on all unit coolers operating below 36oF., 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.
- 5. 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. White Rogers 1609-101 adjustable thermostat with remote bulb positioned in return airstream of evaporator
 - e. Electrical disconnect switch in NEMA 4 enclosure
 - f. Condenser and Evaporators to be built with Electrofin coating to retard salt air deterioration. Coils to be coated with Technicoat 10-2 coating for protection against salt air environment.
- 6. Two (2) fan door activation switches to turn off evaporator coils when door is opened.

B. Refrigerant 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' OC 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: Armaflex insulation by Armstrong. ¾' thick at medium- temp 1" thick at low-temp. Refrigerant lines in PVC or EMT conduit: sealed at both ends with Dow Corning 3-6548 silicone RTV foam. Exterior Refrigerant Lines to be wrapped by refrigeration system installer in self-fastening jacket of Type 3003-H14 aluminium alloy 0.016-inch thick. Provide aluminium strapping and seals for applying aluminium jacket and covers according to manufacturer's recommendations to provide completely weather-tight covering.

C. Evacuation and Charging:

1. 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.

- 2. Charging subsequent to the initial charge, which is contained in the condensing unit (R22 Refrigerant for medium and high temp units, R513A Non- CFC Ozone Depletion Refrigerant on low temp units) (Refrigerant must meet District Standards, Industry Standards and local Codes): given through the charging valve in the high side passing all of 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.
- D. Refrigeration system to be installed by the PRE-APPROVED INSTALLERS listed below:
 - 1. QBR Refrigeration, 30083 Hwy 90 Blvd., Katy, TX 77493, Mr. Andy Spellins, (713) 973-2875, andy.spellins@gbrsales.com
 - 2. Machine Ice, 8915 Sweetwater Ln., Houston, TX 77037, Mr. Will Weaver, (281) 448-7823
 - 3. Coolers Inc., 6922 Alder Dr., Houston, TX 77081, Mr. Lee Mamone, (713) 665-8886

2.35 PRE-APPROVED KITCHEN EQUIPMENT CONTRACTORS

- A. Only the following named Subcontractors and those approved later, if any, are approved for inclusion in the Contractor's Bid.
- B. Any contractor requesting inclusion within this bid are required to submit AIA form 305 minimum 14 days prior to bid date for review, or as required by Architect.
 - 1. Stafford Smith, Mr. JP Garcia, 7129 North Loop East, Houston, TX 77028, (713) 892-5001, E-mail: jpgarcia@staffordsmith.com
 - 2. Kirby Restaurant Supply, Mr. Billy Anderson, 809 S. Eastman Road, Longview, Texas 75602, Phone: (903) 757-2723, Fax: (903) 757-9519, Email: billya@kirbyrestaurantsup.com
 - 3. Mission Restaurant Supply, 1126 S. St. Mary's Street, San Antonio, Texas 78210. Mr. Brian Mosher, Phone (210) 354-0690, Fax (210) 354-0746, E-mail: brianM@missionrs.com
 - 4. Texas Metal Equipment Company, Mr. Matt Wenzel, 6707 Mayard, Houston, Texas 77041, (713) 466-8722, Fax: (713) 466-0166, E-mail: estimating@tmeco.com
 - 5. Kommercial Kitchens, Mr. Terry Woodard, 13544 East Fwy., Houston, TX 77015, (409) 769-1199, E-mail: terry@kommercialkitchens.com
 - 6. Pasco Brokerage, Ms. Kathryn Hollon, 6465 Chase Oaks Blvd., Plano, Texas 75023, (972) 596-3350, E-mail: estimating@pascoinc.net
 - 7. Amundsen Commercial Kitchens, Mr. Lewis Beville, 105 Montie, Longview, TX 75604, (903) 576-6354, E-mail: lewis@afeok.com
 - 8. Supreme Fixtures Co., Inc., Mr. Tim Hampel, 11900 Vinny Ridge Road, P.O. Box 193655, Little Rock, AR 72219, Phone: (501) 455-2552, Fax: (501) 455-0802, E-mail: tim@supremefixture.com

2.36 PRE-APPROVED STAINLESS-STEEL FABRICATION SUPPLIERS

A. Only the following named Subcontractors and those approved later, if any, are approved for inclusion in the Contractor's Bid.

- B. Any supplier requesting inclusion within this bid are required to submit AIA form 305 minimum 14 days prior to bid date for review, or as required by Architect.
 - 1. Texas Metal Equipment Company, Mr. Andrew Harman, 6707 Mayard, Houston, Texas 77041, (713) 466-8722, Fax: (713) 466-0166
 - 2. Kommercial Kitchens, Mr. Terry Woodard, 13544 East Fwy., Houston, TX 77015, (832) 767-5287
 - 3. Mission Restaurant Supply, 1126 S. St. Mary's Street, San Antonio, Texas 78210. Mr. Brian Mosher, Phone (210) 354-0690, Fax (210) 354-0746, E-mail: brianM@missionrs.com

PART 3 - EXECUTION

3.1 DELIVERY AND INSTALLATION

- A. Supervision: Provide a skilled and proficient 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 job-site 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 ¼" or less occur adjacent to or between equipment, insert rope backing and smoothly applied General Electric construction sealant Series SE-1200 silicone mastic (silver color). Mask both sides of gap for neat application of sealant and remove excess. If space exceeds ¼," 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" OD drain tube penetration into floor sink/floor drain at -2½" BFF. Patch the floor to match adiacent 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" OD 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: Fibreboard or plywood taped to tops and exposed body panels/components.
- 2. Manufactured Equipment: Fibreboard 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. Lubricate and adjust drawer slides, hinges, casters.
- C. Adjust pressure regulating valves, timed-delay relays, thermostatic controls, temperature sensors, exhaust hood grilles, etc.
- D. Clean or replace faucet aerators, line strainers.
- E. Touch-up damage to painted finishes.
- F. Start up and check operation of all refrigeration systems for at least 72 hours prior to acceptance.

3.3 EQUIPMENT START-UP/DEMONSTRATION

- A. Carefully test, adjust, and regulate all equipment in accordance with the manufacturer's instructions and certify in writing to the Owner that the installation, adjustments and performance are in full compliance.
- B. Provide the Owner or food service 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 they have completed their work, made a thorough review of the installation/operation of each item in the contract and found it to comply with the Construction Documents.
- B. Repetitive final observations (more than two) and all costs associated thereto 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 \$70.00/hr. and expense basis.

PART 4 - EQUIPMENT SCHEDULE

- 4.1 REGULARLY MANUFACTURED EQUIPMENT/COMPONENTS: Standard finishes and accessories unless specifically deleted or superseded by the Contract Documents.
- **4.2** FABRICATED AND FIELD-ASSEMBLED EQUIPMENT: Arrangement and configuration as shown on Plans, Elevations, Detail Drawings and outlined in Specifications.
- 4.3 REFER TO DRAWINGS: For unit quantities and plumbing, electrical or mechanical provisions required, including manufacturer's optional voltages, wattages, burner capacities, etc.
- 4.4 REFER TO PART 2 PRODUCTS: For accessories, fittings, requirements, and procedures related to the listed buy-out and fabricated equipment.
- 4.5 ALTERNATE MANUFACTURER REQUIREMENTS: A specific product manufactured by the listed pre-approved equals shown under Section 4.7 Food Service Equipment are acceptable only if the specific product can evidence compliance with the specified line items and the contract documents (Refer to Section 1.6; Sub-Section A.).

4.6 RE-USED EXISTING EQUIPMENT IF SHOWN

- A. Existing equipment scheduled for re-use is to be inventoried and documented that equipment is in operating condition once Kitchen Contractor has taken ownership.
- B. Provide pictures of all equipment once inventoried and issue to the architect to ensure that equipment has not been damaged.
- C. Verify locations of all equipment with owner.
- D. Existing equipment that is to be reused may be missing parts or accessories for proper and complete operation. Submit report listing all items with pricing for approval to allow complete installation.
- E. Utility disconnection and re-connection: Under Divisions 22 and 26. Kitchen Contractor to verify utility requirements of existing equipment and coordinate with Foodservice Design Professionals (FDP) as required. All utilities not scheduled for re-use to be capped and covered by required disciplines.
- F. Disassembly, removal, transportation, and relocation: under this Section and scheduled with General Contractor. Owner's representative must be present, coordinate date / time with owner.
- G. Thoroughly clean inside and out prior to relocation.
- H. Review functional parts (e.g., doors, controls, heating elements, compressors, etc.) and submit report of required repairs and estimate of cost. Any finishes or equipment damaged due to construction to be repaired as required.
- I. Existing equipment not scheduled for reuse is to be carefully removed / relocated by the Kitchen Contractor per the Owner's direction. Kitchen Contractor to coordinate date / time with General Contractor and Owner.
- J. Removal or replacement of existing equipment is to be scheduled for times of least interruption and inconvenience to the food service operation. Submit proposed schedule of time frame, task sequence and operation for approval prior to starting work.
- K. Kitchen Contractor to verify size and shape for all existing equipment being re-used and coordinate with Foodservice Design Professionals (FDP) as required.

- L. Any modification(s) required/desired for re-used existing equipment to be verified by the Kitchen Contractor. All modifications must be approved by the Owner and Foodservice Design Professionals (FDP) prior to the modifications being made.
- M. The KEC is to verify and coordinate all the utility requirements with the construction documents as required. Refer to the general specifications re: conflicts.

4.7 FOOD SERVICE EQUIPMENT

- A. All equipment to have a performance check from factory authorized personnel. Warranties will begin on the day of performance check.
- B. All equipment and internal components should be of domestic origin where possible.

ITEM NO. 101 AIR SCREEN - OF/CI

QUANTITY1

Manufacturer: Mars

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

Alternate: Berner

- 1. Air curtain, STD2 series model, unheated, obsidian black exterior. Size unit to fit door.
- 2. Air Curtain to include Model #J0705 Controller Kit. Controller kit to come complete with plastic magnetic reed switch, surface mounted, 1 HP max, 115v/1-ph limit switch. The magnet to be mounted on the surface of the door jamb and the door.
- 3. Confirm clearance above door prior to installation. Air Curtain to accommodate door width.
- 4. 114000 to provide magnetic reed switch kit loose to General Contractor for installation by Division 26. Division 26 to route flexible conduit to j-box on cabinet. Routing to be clean and secured to building.

ITEM NO. 102 COLD STORAGE ASSEMBLY - OF/CI

QUANTITY1

Manufacturer: Thermokool

Model: --

Size and Shape: Refer to drawings

Alternate: American Panel, Thermalrite, Bally, Kolpak

- 1. Installation to be completed by Factory Approved / Authorized installer. Refer to Section 2.33 Submittal drawings to include factory approval letter or certificate.
- 2. Assembly to have 9'-6" interior clearance.
- 3. 304 #3 finish 20 gauge stainless steel finish where exposed, 20 gauge galvanized steel where concealed.
- 4. Factory floor with smooth aluminum finish, recessed in slab 8 1/2". Secure floor to wall assembly with cam-lock assembly. KEC to ensure the floor assembly is level prior to the wearing bed installation. Kitchens finished floor to extend to walk-in.
- 5. Threshold to be smooth and level.
- 6. Interior walls to be .040" aluminum, white embossed texture on walls.
- 7. Ceiling to be embossed textured .040" aluminum baked white enamel.
- 8. Two (2) 36" doors. Doors to be 18 gauge stainless steel, type 304 (18-8), #3 finish, with heated perimeter / door jambs / windows and threshold heaters. Each door to be equipped with 3'-0" high diamond tread kick plate on both sides of doors.

- 9. 18 gauge stainless steel, type 304 (18-8), #3 finish trim where adjacent to walls.
- 10. Freezer One (1) lot LED light fixtures to operate in temperatures to -20 F.
- 11. Refrigerator- One (1) lot LED light fixtures.
- 12. 3'-0" high diamond tread plate at exposed exterior surfaces. Fasten to wall with stainless steel fasteners.
- 13. Provide door bumper at doors.
- 14. Compartments to be have all electrical concealed within the walls or located above the ceiling.
- 15. Provide alarm system to include hi/low limits. Route temperature sensor to be located to the side of evaporator coil.
- 16. Doors to be provided with CCI Industries, Inc., Clear-VU swinging door assemblies.
- 17. K.E.C. to provide aluminum coved base to interior of assembly. Provide sealant between floor and wall panels.
- 18. All holes in assembly to be sealed by factory installer.
- 19. Pressure relief port to be sized per manufacturers recommendations, locate on cooler/freezer common wall and on cooler wall.
- 20. KEC to field verify all horizontal/vertical measurements and conditions at the building prior to fabrication or delivery of equipment.
- 21. KEC to provide 1 year walk-in panel installation warranty. KEC is responsible for overall install accuracy/quality and quality control of work performed regardless of installer or any field modifications due to building/construction conditions. KEC to provide Letter of Install Approval to FDP upon completed install
- 22. Interwiring of temperature monitor panel to master building alarm system or to the Owner's network. Technology department to provide all interfacing of alarm system and with the building alarm system. Conduit from refrigeration system to monitor by Division 26. Temperature Monitor installation at 4'-0" above finished floor. All conduit to be located above walk-in cooler/freezer ceiling. Exposed electrical conduit is not acceptable. Threshold to be smooth and level need to be moved up just after last flooring option line.
- 23. Manufacturer to review final installation and provide letter confirming installation meets manufacturer requirements.
- 24. **Special Instruction:** Assembly to be connected to back-up generator per TISD standards.

ITEM NO. 103 COLD STORAGE REFRIGERATION SYSTEM - OF/CI

QUANTITY1

Manufacturer: RDT

Model: ZS1-2 EcoSmart
Size and Shape: Refer to drawings

Alternate: Cold Zone, Cold Storage Manufacturer

- 1. Air cooled system.
- 2. Cooler temperature to be +35 degrees.
- 3. Freezer temperature to be -10 degrees.
- 4. EcoSmart system on demand defrost.
- 5. KE2 Controllers located per districts requirements.
- 6. S/S covered housing.
- 7. All exterior piping to be aluminum wrapped.
- 8. System to accommodate Item No. 102 Cold Storage Assembly.
- 9. S/S covered housing mounted to a 24" tall 1/8 galvanized angle iron frame anchored to concrete pad. Provide S/S skirting around frame.

- 10. Mount condensing unit on common exterior rack. Refer to Architectural and Engineering drawings for exact location of remote unit. Coordinate routing of refrigeration lines and conduit with appropriate trades. Heat tape and insulate all drain lines. General Contractor to seal all building penetrations at refrigeration lines.
- 11. **Special Instruction**: Unit to be connected to back-up generator per TISD standards.

ITEM NO. 104 COLD STORAGE SHELVING - OF/CI

QUANTITY2

Manufacturer: Cambro

Model: Camshelving Premium Size and Shape: Refer to drawings

Alternate: ---

- 1. Each unit to be four (4) tiers high with open grid mats.
- 2. Four (4) 74" post per unit. Provide foot plates at all posts when assembly is supplied with walk-in floor.
- 3. Refer to drawings for size, width and lengths.
- 4. Quantity Two (2) to equal one (1) lot: all shelving shown within cold storage assembly.
- 5. Special Instructions: Verify shelving requirements with approved submittal prior to ordering.

ITEM NO. 105 DUNNAGE RACK - OF/CI

QUANTITY4

Manufacturer: Cambro

Model: Camshelving Premium Size and Shape: Refer to drawings

Alternate: ---

1. Size as shown.

ITEM NO. 107 DRY STORAGE SHELVING - OF/CI

QUANTITY1

Manufacturer: Cambro Model: ---

Size and Shape: Refer to drawings

Alternate: ---

- 1. Each unit to be five (5) tiers high with open grid shelving.
- 2. Four (4) 86" posts per unit.
- 3. Quantity One (1) to equal One (1) Lot: all shelving shown within the dry storage room.
- 4. Refer to drawings for size, width and lengths.
- 5. Verify shelving requirements with approved submittal prior to ordering.

ITEM NO. 108 CAN RACK - OF/CI

QUANTITY1

Manufacturer: New Age Model: 1250CK

Size and Shape: Refer to drawings

- 1. Three (3) sets 1255, of shelf inserts to accommodate #5 and #10 cans.
- 2. Four (4) casters with brakes.

ITEM NO. 109 ICE MAKER W/ BIN - OF/CI

QUANTITY1

Manufacturer: Hoshizaki

Model: KML-500MAJ/B-500
Size and Shape: Refer to drawings
Alternate: Manitowoc

- 1. One (1) ice maker model no. KML-500MAJ
- 2. One (1) ice bin model no. B-500
- 3. Stainless steel legs.
- 4. Provide bin adapter kit as required.
- 5. Provide Luminice II Virus and Bacteria Inhibitor.
- 6. Provide size and quantity as required: Dormont Model No. 73-3135-72 water quick disconnects installed between filter and ice machine.
- 7. Cord and plug assembly, coordinate NEMA configuration with electrician.
- 8. One (1) Everpure EV9293-01 pre-filter and water filter sized to manufactures recommendations. Mount on wall adjacent to ice machine in an easily accessible location.
- 9. Coordinate cord and cap with receptacle. Water supply to filter to be hard copper plumbed. 72" long flex hose from filter to ice maker with 48" wall restraint cable. Interconnection thru water filter to ice machine and final connection by Division 22. Water filter overflow tube to be strapped to back side of ice machine and extend to 1" above floor sink.

ITEM NO. 110B STACKED WASHER/DRYER - OF/CI

QUANTITY1

Manufacturer: Owner Furnished

Model: ---

Size and Shape: Refer to drawings

- 1. Washer:
- 2. 2.0 cubic ft. capacity.
- 3. Straight vane agitator.
- 4. 7 cycles, 2-speed.
- 5. 4 water temperatures.
- 6. "Quick pak" sound insulation.
- 7. Color to be white.
- 8. Water and drain hoses.
- 9. Dryer:
- 10. 3.4 cubic ft. capacity.
- 11. 4 cycles plus Air only.
- 12. Auto dry.
- 13. Wrinkle Guard 1.
- 14. Color to be white.
- 15. To include dryer cord and vent kit.

- 16. Units to include model stationary assembly including: white stack stand, dryer wall mount kit, door latch kit.
- 17. Verify utility requirements with owner/operator. Models at time of delivery shall be the current models numbers.

ITEM NO. 111 CHEMICAL SHELF - OF/CI

QUANTITY1

Manufacturer: Cambro

Model: Camshelving Premium Size and Shape: Refer to drawings

Alternate: ---

- 1. Each unit to be Five (5) tiers high with open grid shelving.
- 2. Four (4) 74" posts per unit.

ITEM NO. 121 TWO COMPARTMENT SINK W/DISPOSER - OF/CI

QUANTITY1

Manufacturer: Custom Fabricated

Model: ---

Size and Shape: Refer to drawings

- 1. Top: 14 gauge type 304 S/S marine edge with 2" turndown at free sides.
- 2. Open base construction.
- 3. 10" high splash where adjacent to walls/fixtures.
- 4. Two (2) 24" x 26" x 15" deep sink compartments.
- 5. One (1) T&S model no. B-0291, splash mount faucet, 18" swing nozzle,LL inlets, for ¾" hot and cold water connections.
- 6. Two (2) Fisher 22306 twist waste valve 3 1/2" x 2" with overflow and tailpiece. Provide 18 gauge S/S bracket for drain handle welded to sink bottom.
- Provide One (1) T&S model no. B-0133-EE-CR-8C pre-rinse, two (2) B-0108-C spray head, two(2) B-0109-04 18" long wall bracket (dealer to cut to correct length), one (1) additional spray face model no. 108SFRK with ceramic cartridges.
- 8. 16 gauge S/S undershelf per drawings.
- 9. Disposer installed in top integrally welded disposer cone. Notch and punch splash turn back for vacuum breaker. 12 gauge S/S bracket mounted below counter top for disposer control panel ground and polished to match top.
- 10. 12" deep single post mounted perforated overshelf at 18" above counter top, punched to accommodate spray rinse.
- 11. Post mounted utensil rack, extend 1-5/8" diameter S/S post from back splash, turn forward 12" and weld full length x 2" x ¼" S/S bar with Component Hardware model no. V-77-4401 S/S sliding hooks at 8" on center. Verify height with owner.
- 12. Omit rear rail at sink compartments, disposer and front rail at hose bibb.
- 13. Two (2) "Richlite" ½" thick removable sink covers installed at each sink. Weld ¼" bar stock, set 5/8" below work surface at all four corners for support of sink covers. Two (2) finger holes per board.
- 14. Provide top and bottom c-channel support storage for sink covers at right end of counter.
- 15. One (1) Edlund model no. S-11 Manual can opener, mounted on raised platform.
- 16. Flanged feet at front only.

17. Seal at all splash penetrations.

ITEM NO. 123 DISPOSER-CONE MOUNT/SINK MOUNT - OF/CI

QUANTITY2

Manufacturer: Salvajor

Model: 200-CA-18-ARSS -LD/200-SA-6-ARSS-LD

Size and Shape: Refer to drawings

Alternate: ---

- 1. Fixed nozzle.
- 2. Delete standard syphon breakers and provide T & S B-0456-04 vacuum breakers and mount 6" from tabletop to base of breaker.
- 3. Solenoid valve.
- 4. Flow control.
- 5. Model no. ARSS-LD control panel.
- 6. Auto-reverse.
- 7. Dejamming tool.
- 8. Install vacuum breaker in splash
- 9. S/S cone cover.
- 10. Perforated silver saver and disposer cone with scrap ring.
- 11. Two (2) Swirl inlet located in disposer cone at a 45 degree angle.
- 12. GC to pipe 1/2" cold water to disposer body and swirl inlets. Excess electrical cord to be secured to fabrication as required. Install into counter by section 114000.

ITEM NO. 124 WORKTABLE W/ OVERSHELF - OF/CI

QUANTITY1

Manufacturer: Custom Fabricated

Model:

Size and Shape: Refer to drawings

Alternate: ---

- 1. Top: 14 gauge type 304 S/S top with 6" high backsplash at wall and 2" turndown at free sides.
- 2. Open base construction.
- 3. 16 gauge S/S overshelf post mounted 18" above working surface.
- 4. 16 gauge S/S undershelf.
- 5. Two (2) 20" W x 20" L drawer assemblies. Component Hardware #S52-2020 drawer slides with delrin bearings 200lb capacity. Component Hardware #S80-2020 drawer pan.
- 6. Close back of splash when exposed.

ITEM NO. 125 20 QT. MIXER W/STAND - OF/CI

QUANTITY1

Manufacturer: Hobart Model: HL200

Size and Shape: Refer to drawings

- 1. Food mixer, Bench Model, 1/2-HP motor, 20 qt. Capacity.
- 2. 115/60/1 ph.

- 3. 15 minute timer.
- 4. Epoxy enamel finish-bench model.
- 5. One (1) 20 qt. S/S bowl.
- 6. One (1) 20 qt. Aluminum "B" flat beater.
- 7. One (1) 20 qt. S/S "D" wire whip.
- 8. One (1) 20 qt. "ED" dough hook.
- 9. One (1) 20 qt. Lexan splash cover.
- 10. One (1) Caddy model no. T-242 mobile mixer stand, with casters, two (2) with brakes. Secure mixer to table with non-corrosive bolts. Alternate- New Age.
- 11. Stand to be Pre-Drilled to accommodate Mixer.

ITEM NO. 126 WORKTABLE W/SINK - OF/CI

QUANTITY1

Manufacturer: Custom Fabricated

Model: --

Size and Shape: Refer to drawings

Alternate: ---

- 1. Top: 14 gauge type 304 S/S, 2" turn down at free sides, 10" high splash on rear or adjacent equipment/walls.
- 2. Open base construction.
- 3. 12" deep single post mounted overshelf at 18" above counter top. Modify shelf length per drawings.
- 4. 16 gauge S/S undershelf.
- 5. 18 gauge butt jointwall panel from splash to underside of shelf.
- 6. Two (2) 20" W x 20" L drawer assemblies. Component Hardware #S52-2020 drawer slides with delrin bearings 200lb capacity. Component Hardware #S80-2020 drawer pan.
- 7. One (1) 15" x 18" x 10" deep sink compartment. Coordinate location with drain overflow.
- 8. One (1) T&S model no. B-0320-BB-CR, rigid gooseneck, ceramic cartridges, deck faucet for ³/₄" hot and cold water connections.
- 9. One (1) Fisher 22306 twist waste valve 3 1/2" x 2" with overflow and tailpiece
- 10. Provide 18 gauge S/S bracket for drain handle welded to sink bottom.
- 11. Omit rear crossrail at sink section.
- 12. Flanged feet at front legs.

ITEM NO. 127 SLICER WITH STAND - OF/CI

QUANTITY1

Manufacturer:HobartModel:HS9N-1

Size and Shape: Refer to drawings

- 1. One (1) high/low fence assembly.
- 2. Tubular S/S food chute.
- 3. Cord and plug.
- 4. One (1) Caddy slicer T-249A stand with casters, two (2) with brakes. Alternate-New Age

ITEM NO. 128 UTILITY CART - OF/CI

OUANTITY3

Manufacturer: Lakeside **Model:** 522

Size and Shape: Refer to drawings

Alternate: Caddy

- 1. Four (4) N.S.F. approved non-marking casters, Two (2) with brakes.
- 2. Extended perimeter bumper.

ITEM NO. 129 WORKTABLE W/S.BAR UT.RACK - OF/CI

QUANTITY1

Manufacturer: Custom Fabricated

Model: ---

Size and Shape: Refer to drawings

Alternate: ---

- 1. Top: 14 gauge type 304 S/S, 2" turn down at free sides.
- 2. Open base construction.
- 3. 16 gauge S/S undershelf.
- 4. Two (2) 20" W x 20" L drawer assemblies. Component Hardware #S52-2020 drawer slides with delrin bearings 200lb capacity. Component Hardware #S80-2020 drawer pan.
- 5. Flanged feet.
- 6. Post mounted utensil rack, extend 1-5/8" diameter S/S post from cross rail, thru top to 78" A.F.F. and weld full length x 2" x ½" S/S bar with Component Hardware model no. V-77-4401 S/S sliding hooks at 8" on center. Verify height with Owner.
- 7. Provide a duplex receptacle and housing mounted below countertop per drawings. Interconnect and prewire a 5'-0" cord and plug out of receptacle housing for plugging into ceiling drop cord receptacle. 114000 and Div. 26 to coordinate location of drop cord receptacle.

ITEM NO. 136 BAKER'S TABLE - OF/CI

QUANTITY1

Manufacturer: Custom Fabricated

Model: ---

Size and Shape: Refer to drawings

- 1. Top: 14 gauge type 304 S/S with 2" square turn down at front, 6" high enclosed splash at sides and rear.
- 2. Provide finished back at exposed backsplash.
- 3. 12" deep post mounted overshelf at 18" above counter top.
- 4. 16 gauge S/S flour trough.
- 5. Rear rail only.
- 6. One (1) lot Rubbermaid no. FG360288WHT ingredient bins.
- 7. One (1) enclosed 3-tier drawer base.

ITEM NO. 138 PAN RACK - OF/CI

OUANTITY5

Manufacturer:CresCorModel:207-UA-13ASize and Shape:Refer to drawings

Alternate: ---

- 1. Four (4) 5" casters.
- 2. Adjustable universal slides on 1-1/2" centers.
- 3. Corner bumpers.
- 4. Omit bumper on roll-in racks.

ITEM NO. 139 INSUL MOBILE PROOFER

QUANTITY1

Manufacturer: Cres Cor

Model: H-137-WSUA-12D Size and Shape: Refer to drawings

Alternate: ---

- 1. Insulated proofer/heated cabinet.
- 2. Field reversible doors.
- 3. Adjustable universal angles.
- 4. Four (4) 5" casters, two (2) with brakes.
- 5. Tempered glass door windows.
- 6. Key lock handle.
- 7. Corner bumpers.
- 8. Cord and plug. Coordinate NEMA configuration with Electrician.
- 9. Thermometer.
- 10. 1500 watt heater.
- 11. Metro does not offer auto-water fill feature.

ITEM NO. 151 FIRE PROTECTION SYSTEM - OF/CI

QUANTITY2

Manufacturer: Ansul Model: R102

Size and Shape: Refer to drawings

- 1. Duct and plenum protection to exhaust hood.
- 2. Surface protection for cooking equipment.
- 3. Locate remote fire pulls as recommended by Fire Marshal.
- 4. One (1) lot Mechanical gas valve (maximum diameter as required). Size as required. Furnished by Section 114000, installed by Division 22. Kitchen Equipment Contractor to coordinate location with local Fire Marshal requirements prior to submittal review. All conduits to be recessed within wall, SURFACE MOUNTING WILL NOT BE ACCEPTED.
- 5. System to meet U.L. 300 requirements.
- 6. Provide one (1) hand held Type 'K' and ABC 6 liter fire extinguisher per Ansul System, surface wall mounted.

- 7. Exposed pipe threads are unacceptable.
- 8. All exposed piping to be chrome plated.
- 9. All hood penetrations to have U.L. listed "Quick Seal". Provide s/s escutcheons at all hood penetrations.
- 10. Provide phenolic I.D. labels for exhaust hood, remote fire pull, light/fan switches and fire protection system.
- 11. Provide a manufacturer performance test and report that verifies this system is fully operational.
- 12. Provide s/s cabinet as shown on plan.
- 13. Installer to provide one (1) Ansul system per exhaust hood, review drawings and provide systems as required.
- 14. Install hand held extinguishers, maximum of 3'-2" A.F.F. to top of unit.

ITEM NO. 152 EXHAUST HOOD - OF/CI

QUANTITY1

Manufacturer: Mod-U-Serve Model: W-cpb

Size and Shape: Refer to drawings

Alternate: Avtec

- 1. Hood to meet IECC all curent Mechanical and Energy Codes.
- 2. All 18 gauge S/S construction and s/s rear back at exposed surface.
- 3. Insulated hood ends.
- 4. Hood manufacturer to perform hood balance reports, to be sent directly to FDP prior to final project completion.
- 5. Continuous capture.
- 6. Ceiling mounted supply plenum with light fixtures, coordinate conditioned/tempered air with engineer. Locate supply plenum in ceiling, coordinate location with GC as required. (W-cpb)
- 7. Recess mounted LED light fixtures. All exposed fire control piping to be chrome plated and all hood penetrations sealed with S/S escutcheons.
- 8. 4" air space at rear of hood.
- 9. S/S closure panel between hoods if back to back hoods.
- 10. S/S filters and grease cup. Provide filter removal tool.
- 11. Ductwork and final connection to hood above ceiling to be by the Mechanical Contractor.
- 12. Ventilators to have adjustable make-up air damper which must remain accessible for adjustment
- 13. Make-up air fire dampers. Insulated make-up air plenum with 1" thick foil faced fiberglass insulation.
- 14. S/S filters and grease cup with filter removal tool.
- 15. ONLY IF WALLS ARE NOT CMU: Provide 18 gauge stainless steel wall panel if wall is metal stud with gyp board. "Stainless steel "Tee" type joining strips at panel joints and "C" type finishing strips at ends not protected full height with corner guards. Extend from top of coved base to underside of hood. Top of panel to be secured to wall with "Z" clips, bottom secured to wall with stainless steel overhead molly bolts. Wall panels to extend the full length of the hood wall.
- 16. S/S c-channel closure panel from top of hood to ceiling.
- 17. ½" diameter steel hanger rods at 4'-0" O.C. maximum to be by Kitchen Equipment Supplier, but they are to be anchored to supporting structure (or slab) by the General Contractor in the locations required by exhaust hood shop detail.
- 18. Provide pre-set temperature sensor for automatic start of exhaust fan when the condition exists where the exhaust fan is not initiated at the wall switch and the temperature in the exhaust canopy reaches 110° F. At

- the end of the cooking day when the fan is disengaged at the wall switch the thermostat (temperature sensor) will keep the exhaust fan on until the temperature in the exhaust canopy drops below 110° F.
- 19. Refer to individual hood lengths as shown on drawings for each assembly required. Install at 6'-10" A.F.F. to bottom of hood, coordinate duct and fan requirements with Mechanical Contractor. Interconnect to wall mounted light switch by Division 26. Bulbs for light fixtures to be furnished and installed by Kitchen Equipment Contractor.
- 20. Provide simple on/off switches for hood fans and lights. Control panels will not be accepted.
- 21. **Special Instructions**: Unit to be connected to back-up generator per TISD standards.

ITEM NO. 153 EXHAUST HOOD - OF/CI

QUANTITY1

Manufacturer: Mod-U-Serve Model: W-cpb

Size and Shape: Refer to drawings

Alternate: Avtec

- 1. Hood to meet all current Mechanical and Energy Codes.
- 2. All 18 gauge S/S construction and s/s rear back at exposed surface.
- 3. Insulated hood end panels.
- 4. Hood manufacturer to perform hood balance reports, to be sent directly to FDP prior to final project completion.
- 5. Continuous capture.
- 6. Ceiling mounted supply plenum with light fixtures, coordinate conditioned/tempered air with engineer. Locate supply plenum in ceiling, coordinate location with GC as required.
- 7. Recess mounted LED light fixtures. All exposed fire control piping to be chrome plated and all hood penetrations sealed with S/S escutcheons.
- 8. 4" air space at rear of hood.
- 9. S/S closure panel between hoods if back to back hoods.
- 10. S/S filters and grease cup. Provide filter removal tool.
- 11. Ductwork and final connection to hood above ceiling to be by the Mechanical Contractor.
- 12. Ventilators to have adjustable make-up air damper which must remain accessible for adjustment
- 13. Make-up air fire dampers. Insulated make-up air plenum with 1" thick foil faced fiberglass insulation.
- 14. S/S filters and grease cup with filter removal tool.
- 15. **ONLY IF WALLS ARE NOT CMU:** Provide 18 gauge stainless steel wall panel if wall is metal stud with gyp board. "Stainless steel "Tee" type joining strips at panel joints and "C" type finishing strips at ends not protected full height with corner guards. Extend from top of coved base to underside of hood. Top of panel to be secured to wall with "Z" clips, bottom secured to wall with stainless steel overhead molly bolts. Wall panels to extend the full length of the hood wall.
- 16. S/S c-channel closure panel from top of hood to ceiling.
- 17. ½" diameter steel hanger rods at 4'-0" O.C. maximum to be by Kitchen Equipment Supplier, but they are to be anchored to supporting structure (or slab) by the General Contractor in the locations required by exhaust hood shop detail.
- 18. Provide pre-set temperature sensor for automatic start of exhaust fan when the condition exists where the exhaust fan is not initiated at the wall switch and the temperature in the exhaust canopy reaches 110° F. At the end of the cooking day when the fan is disengaged at the wall switch the thermostat (temperature sensor) will keep the exhaust fan on until the temperature in the exhaust canopy drops below 110° F.

- 19. Refer to individual hood lengths as shown on drawings for each assembly required. Install at 6'-10" A.F.F. to bottom of hood, coordinate duct and fan requirements with Mechanical Contractor. Interconnect to wall mounted light switch by Division 26. Bulbs for light fixtures to be furnished and installed by Kitchen Equipment Contractor.
- 20. Provide simple on/off switches for hood fans and lights. Control panels will not be accepted.
- 21. **Special Instructions**: Unit to be connected to back-up generator per TISD standards.

ITEM NO. 161 CONVECTION OVEN - OF/CI

QUANTITY2

Manufacturer: Blodgett

Model: DFG-100ES DBL Size and Shape: Refer to drawings

Alternate: ---

- 1. S/S front, top and sides.
- 2. Two (2) 1/2 HP 2-speed motors.
- 3. Natural gas.
- 4. SSI-M solid state infinite control with manual timer.
- 5. Electronic spark ignition.
- 6. Five (5) oven racks per compartment.
- 7. Dual pane thermal windows.
- 8. Simultaneous door operation.
- 9. Heavy duty casters, two (2) with brakes.
- 10. Provide quantities and sizes required: Dormont Model #VER-KITCF-2S-48" Gas Conn. Kit, 48" long, dble. Supr-Swivel coupling with SafetyQuick safety fitting, w/coiled restraining device, full port gas valve, antimicrobial coating, lifetime warranty.
- 11. Dedicated gas connections, do not manifold.
- 12. Shunt trip breaker by Division 26.

ITEM NO. 162 DBL CONVECTION STEAMER - GAS - OF/CI

QUANTITY1

Manufacturer:ClevelandModel:24CGA10.2Size and Shape:Refer to drawings

- 1. Double stack ten (10) pan capacity.
- 2. Two (2) compartments.
- 3. Individual connections.
- 4. Stainless steel legs.
- 5. Field stacking kit.
- 6. Provide quantities and sizes required: Dormont Model #VER-KITCF-2S-48" Gas Conn. Kit, 48" long, dble. Supr-Swivel coupling with SafetyQuick safety fitting, w/coiled restraining device, full port gas valve, antimicrobial coating, lifetime warranty.
- 7. Provide Everpure filtration system as recommended by the manufacturer.
- 8. Provide sizes and quantities as required: Dormont s/s water disconnect from filter to steamer, color coded for filtered and non-filtered water.

- 9. KEC to coordinate filtered and unfiltered water with steamer, do not connect filtered water to unfiltered water connection.
- 10. Coordinate location with floor sink outside steam free zone. Division 26 to provide shunt trip breaker. General Contractor to interconnect equipment to the remote filter system.

ITEM NO. 163 30 GA. TILT BRAISING PAN - MANUAL TILT - OF/CI

QUANTITY1

Manufacturer:GroenModel:BPM-30GCSize and Shape:Refer to drawingsAlternate:Cleveland

- 1. Manual tilt.
- 2. Classic controls
- 3. S/S construction.
- 4. Open leg frame.
- 5. Steamer pan inserts.
- 6. Pan carrier.
- 7. Etch marks.
- 8. Double pantry swing faucet with 60" Spray hose.
- 9. Flanged feet. Secure rear to floor with non-corrosive anchors.
- 10. Provide quantities and sizes required: Dormont Model #VER-KITCF-2S-48" Gas Conn. Kit, 48" long, dble. Supr-Swivel coupling with SafetyQuick safety fitting, w/coiled restraining device, full port gas valve, antimicrobial coating, lifetime warranty.
- 11. Trench Liner to consist of:
- 12. S/S trench liner by 114000. Installation by G.C.
- 13. Custom Fabricated or IMC/Teddy
- 14. Fibergrate: Gray #2 1" Thick, 1 1/2" squares mesh, Quartz grit top. Provide in two (2) equal sections, all ends to be finished ends.
- 15. 14 gauge s/s liner
- 16. Klein no. 1834-1010-100 basket drain.
- 17. Klein no. 1870-1001-3251 safety chain.
- 18. Location of trench liner is critical. G.C. and 114000 to verify location prior to concrete pour. Oversize trench liner block out to accommodate equipment pour path.

ITEM NO. 165 TWO BURNER RANGE - OF/CI

QUANTITY1

Manufacturer:GarlandModel:MST4S-E

Size and Shape: Refer to drawings

- 1. S/S Cabinet base with door.
- 2. Removable cast iron grates.
- 3. Removable drippings tray.
- 4. 1" rear gas connections.
- 5. 10" gas flue riser if unit is at Production wall.
- 6. Heavy duty casters, Two (2) with brakes.

- 7. External pressure regulator.
- 8. S/S front end caps at manifold.
- 9. Provide quantities and sizes required: Dormont Model #VER-KITCF-2S-48" Gas Conn. Kit, 48" long, dble. Supr-Swivel coupling with SafetyQuick safety fitting, w/coiled restraining device, full port gas valve, antimicrobial coating, lifetime warranty.
- 10. Electronic spark ignition.
- 11. Sentry total flame failure protection.
- 12. **Special Instructions**: Unit to be connected to back-up generator per TISD standards.

ITEM NO. 172 COMBI OVEN - DBL - OF/CI

QUANTITY1

Manufacturer: Alto Shaam

Model: CTP7-20G over VMC-F4G

Size and Shape: Refer to drawings

- 1. Removable, single-point, quick-release, temperature probe.
- 2. 3" casters, set of four (4) Two with brakes.
- 3. Wire rack.
- 4. 5032550 stacking kit.
- 5. Alto-Shaam non-caustic oven cleaner, case of six (6) bottles for use in VMC-F4G.
- 6. Automatic Tablet-based cleaning system for CTP7-20G.
- 7. KEC to coordinate accessories with Owner prior to ordering.
- 8. Smoking feature.
- 9. Heat Shield
- 10. Extended one-year warranty.
- 11. System installation to be reviewed by an authorized factory installer, provide report confirming installation meets factory's requirements.
- 12. Reverse Osmosis System to be 3M model SGLP100-CL-BP (5636204) which Includes: wall mounted with steel mounting bracket, quick disconnect plumbing, cleaning bypass assembly, & connection fittings for standard 3/4" water line. Refer to Manufacturer's Data Sheet for mounting and connection instructions. GC to provide wall blocking as required. Div. 22 to provide all interconnection tubing and components required by RO system. Copper piping to the RO System by Div. 22. Plastic pipe or reinforced opaque beverage tubing from RO System to equipment by Div. 22.
- 13. Provide sizes and quantities as required: Dormont s/s water disconnect from filter to steamer, color coded for filtered and non-filtered water.
- 14. KEC to coordinate filtered and unfiltered water with Combi Oven, do not connect filtered water to unfiltered water connection. Top combi oven requires water connections Bottom combi does not.
- 15. Provide quantities and sizes required: Dormont Model #VER-KITCF-2S-48" Gas Conn. Kit, 48" long, dble. Supr-Swivel coupling with SafetyQuick safety fitting, w/coiled restraining device, full port gas valve, antimicrobial coating, lifetime warranty.
- 16. Water supply to have shut-off valve and back flow preventer furnished and installed by Division 22. Supply water to interconnect thru water filter and then to each oven. Indirect drain line to be ran outside of the footprint of the unit, coordinate location of the related floor sink.

ITEM NO. 187 PASS-THRU HEATED CABINET- 2DR - OF/CI

OUANTITY3

Manufacturer:TraulsenModel:AHF-232WPSize and Shape:Refer to drawings

Alternate: ---

- 1. Anodized aluminum interior and S/S exterior.
- 2. Interior lights with bulbs.
- 3. Exterior digital thermometer.
- 4. Locking hardware.
- 5. Universal 18" x 26" and 12" x 20" pan files on 4" centers in all sections.
- 6. Casters.
- 7. Furnish start-up and three (3) years repair service, including parts and labor.
- 8. Controls mounted on kitchen side.
- 9. Fully welded telescoping S/S trim at wall. Trim is not to be secured to the equipment.
- 10. Full height doors hinged as per plan. Glass doors located on kitchen side and stainless steel doors on servery side.
- 11. Re-hinging feature.
- 12. Provide opening in wall 2" taller than equipment and 1" wider, KEC to coordinate with GC as required
- 13. **Special Instructions:** One (1) unit to be connected to back-up generator per TISD standards.

ITEM NO. 188 PASS-THRU REFRIGERATOR - 1DR - OF/CI

QUANTITY3

Manufacturer: Traulsen

Model: AHT-132WPUT Size and Shape: Refer to drawings

- 1. Anodized aluminum interior and S/S exterior.
- 2. Interior lights with bulbs.
- 3. Exterior digital thermometer.
- 4. Locking hardware.
- 5. Universal 18" x 26" and 12" x 20" pan files on 4" centers in all sections.
- 6. Casters
- 7. Furnish start-up and three (3) years repair service, including parts and labor.
- 8. Controls mounted on kitchen side.
- 9. Five (5) Year compressor warranty.
- 10. Fully welded telescoping s/s trim at wall. Trim is not to be secured to the equipment.
- 11. Full height doors hinged as per plan. Glass doors located on kitchen side and stainless steel doors on servery side.
- 12. Re-hinging feature.
- 13. Omit plug. Unit to be Hard Wired.
- 14. Provide opening in wall 2" taller than equipment and 1" wider, KEC to coordinate with GC as required.
- 15. **Special Instructions:** One (1) unit to be connected to back-up generator per TISD standards.

ITEM NO. 196 BACK COUNTER - OF/CI

OUANTITY1

Manufacturer: Custom Fabricated

Model: --

Size and Shape: Refer to drawings

Alternate: ---

1. Top: 14 gauge type 304 S/S, 2" turn down at free sides. 4" splash where adjacent to equipment and walls.

- 2. Open base construction.
- 3. Full length 16 gauge S/S undershelf.

ITEM NO. 201 SERVING COUNTER - OF/CI

QUANTITY1

Manufacturer: Mod-u-serve

Model: ---

Size and Shape: Refer to drawings

- 1. Top: 14 gauge S/S top, 2" turn down at sides
- 2. Countertop 34" high, trayslide at ADA approved mounting height.
- 3. Provide raised insulated platform in the front area of all hot food wells
- 4. Countertop at all hot food wells to be recessed 1" to accommodate 18" X 26" sheet pan.
- 5. 12" Corian trayslide with two (2) S/S runner insets mounted at 32" A.F.F..
- 6. Four (4) Hot/Cold built-in food wells with thermostat and manifold drain line into a common drain. Food wells to be insulated and located within a 1" recess, refer to counter sections.
- 7. One (1) Elite IV hot food breath protector with mirror finish posts, lights and heat lamps. Full service to self service adjustable breath protectors, with tempered glass display shelves. Heat lamp and lights to be on separate switches.
- 8. One (1) Moduserve DI-CP Series refrigerated cold pans located and sized per drawings. Provide on/off switch in control panel. Provide pan insert divider strip and perforated false bottoms.
- 9. One (1) Elite IV breath protectors with mirrored finished posts and two tier glass display shelf with lights at cold pan. Full service to self service adjustable breath protectors, with tempered glass display shelves.
- 10. Provide louvered doors at compressor compartments located on both sides of counter.
- 11. One (1) convenience outlet in each control panel.
- 12. Two (2) plumbing and One (1) load center compartment.
- 13. One (1) T & S Model No. B0208 single pantry faucets w/ OC56 cast spouts. Two (2) T & S model no. 512.
- 14. Provide waterproof grommets in counter top for each piece of equipment mounted on counter.
- 15. Full length Component Hardware L75 Series lights located under trayslide pre-wired to single switch located in control panel. Provided and installed by Section 114000
- 16. Provide integral cashier station with cash drawer mounted to the underside of the countertop. Provide enclosed base below with interior shelf.
- 17. 6" S/S adjustable legs.
- 18. ¾" marine grade plywood at face of counter, ½" backerboard to be installed to provide for proper tiling. Tile by counter manufacturer. Color selection by Owner/Architect.
- 19. 18 gauge S/S kick plate with marine grade plywood backing.
- 20. 16 gauge S/S undershelves, refer to drawings.

- 21. Provide recessed electrical outlet in counter body at end of counter for milk coolers.
- 22. Coordinate connection to back-up generator per TISD standards.

ITEM NO. 211 DROP FRONT MILK COOLER - 12CASE - OF/CI

QUANTITY2

Manufacturer:Mod-U-ServeModel:MCT-DM2Size and Shape:Refer to drawings

Alternate: ---

- 1. 18 gauge S/S fully welded liner.
- 2. 20 gauge S/S exterior.
- 3. Double pan insulated doors.
- 4. High pressure insulated foam.
- 5. 5" casters, two (2) with brakes.
- 6. ½" S/S nipple drain.
- 7. Locking mechanism.
- 8. Cord and plug. NEMA 5-15P.
- 9. Corner bumpers.
- 10. 12 case capacity.
- 11. Strip curtains.
- 12. **Special Instruction:** Coordinate location of electrical receptacle so as to not interfere with location of milk dispenser.

ITEM NO. 214 CASH REGISTER - OF/CI

QUANTITY3

Manufacturer: Owner Furnished

Model: --

Size and Shape: Refer to drawings

Alternate: ---

ITEM NO. 217 SERVING COUNTER - OF/CI

QUANTITY1

Manufacturer: Mod-u-serve

Model: --

Size and Shape: Refer to drawings

- 1. Top: 14 gauge S/S top, 2" turn down at sides
- 2. Countertop 34" high, trayslide at ADA approved mounting height.
- 3. Provide raised insulated platform in the front area of all hot food wells
- 4. Countertop at all hot food wells to be recessed 1" to accommodate 18" X 26" sheet pan.
- 5. 12" Corian trayslide with two (2) S/S runner insets mounted at 32" A.F.F..
- 6. Four (4) Hot/Cold built-in food wells with thermostat and manifold drain line into a common drain. Food wells to be insulated and located within a 1" recess, refer to counter sections.
- 7. One (1) Elite IV hot food breath protector with mirror finish posts, lights and heat lamps. Full service to self service adjustable breath protectors, with tempered glass display shelves. Heat lamp and lights to be on separate switches.

- 8. One (1) Moduserve DI-CP Series refrigerated cold pans located and sized per drawings. Provide on/off switch in control panel. Provide pan insert divider strip and perforated false bottoms.
- 9. One (1) Elite IV breath protectors with mirrored finished posts and two tier glass display shelf with lights at cold pan. Full service to self service adjustable breath protectors, with tempered glass display shelves.
- 10. Provide louvered doors at compressor compartments located on both sides of counter.
- 11. One (1) convenience outlet in each control panel.
- 12. Two (2) plumbing and One (1) load center compartment.
- 13. One (1) T & S Model No. B0208 single pantry faucets w/ OC56 cast spouts. Two (2) T & S model no. 512.
- 14. Provide waterproof grommets in counter top for each piece of equipment mounted on counter.
- 15. Full length Component Hardware L75 Series lights located under trayslide pre-wired to single switch located in control panel. Provided and installed by Section 114000
- 16. Provide integral cashier station with cash drawer mounted to the underside of the countertop. Provide enclosed base below with interior shelf.
- 17. 6" S/S adjustable legs.
- 18. ³/₄" marine grade plywood at face of counter, ¹/₂" backerboard to be installed to provide for proper tiling. Tile by counter manufacturer. Color selection by Owner/Architect.
- 19. 18 gauge S/S kick plate with marine grade plywood backing.
- 20. 16 gauge S/S undershelves, refer to drawings.
- 21. Provide recessed electrical outlet in counter body at end of counter for milk coolers.
- 22. Coordinate connection to back-up generator per TISD standards.

ITEM NO. 218 SERVING COUNTER - OF/CI

QUANTITY1

Manufacturer: Mod-u-serve

Model: ---

Size and Shape: Refer to drawings

- 1. Top: 14 gauge S/S top, 2" turn down at sides
- 2. Countertop 34" high, trayslide at ADA approved mounting height.
- 3. Provide raised insulated platform in the front area of all hot food wells
- 4. Countertop at all hot food wells to be recessed 1" to accommodate 18" X 26" sheet pan.
- 5. 12" Corian trayslide with two (2) S/S runner insets mounted at 32" A.F.F..
- 6. Four (4) Hot/Cold built-in food wells with thermostat and manifold drain line into a common drain. Food wells to be insulated and located within a 1" recess, refer to counter sections.
- 7. One (1) Elite IV hot food breath protector with mirror finish posts, lights and heat lamps. Full service to self service adjustable breath protectors, with tempered glass display shelves. Heat lamp and lights to be on separate switches.
- 8. One (1) Moduserve DI-CP Series refrigerated cold pans located and sized per drawings. Provide on/off switch in control panel. Provide pan insert divider strip and perforated false bottoms.
- 9. One (1) Elite IV breath protectors with mirrored finished posts and two tier glass display shelf with lights at cold pan. Full service to self service adjustable breath protectors, with tempered glass display shelves.
- 10. Provide louvered doors at compressor compartments located on both sides of counter.
- 11. One (1) convenience outlet in each control panel.
- 12. Two (2) plumbing and One (1) load center compartment.

- 13. One (1) T & S Model No. B0208 single pantry faucets w/ OC56 cast spouts. Two (2) T & S model no. 512.
- 14. Provide waterproof grommets in counter top for each piece of equipment mounted on counter.
- 15. Full length Component Hardware L75 Series lights located under trayslide pre-wired to single switch located in control panel. Provided and installed by Section 114000
- 16. Provide integral cashier station with cash drawer mounted to the underside of the countertop. Provide enclosed base below with interior shelf.
- 17. 6" S/S adjustable legs.
- 18. ³/₄" marine grade plywood at face of counter, ¹/₂" backerboard to be installed to provide for proper tiling. Tile by counter manufacturer. Color selection by Owner/Architect.
- 19. 18 gauge S/S kick plate with marine grade plywood backing.
- 20. 16 gauge S/S undershelves, refer to drawings.
- 21. Provide recessed electrical outlet in counter body at end of counter for milk coolers.
- 22. Coordinate connection to back-up generator per TISD standards.

ITEM NO. 249 THREE COMPARTMENT SINK - OF/CI

QUANTITY1

Manufacturer: Custom Fabricated

Model: ---

Size and Shape: Refer to drawings

Alternate: ---

- 1. Top: 14 gauge S/S 3" high 1-1/2" rolled rim at free sides, 10" high splash at walls.
- 2. Open base construction.
- 3. Omit rear rail at sink.
- 4. One (1) 30" x 26" x 15" deep sink compartment and two (2) 24" x 26" x 15" deep sink compartment.
- 5. Two (2) T&S model no. B-0291, splash mount faucet, 18" swing nozzle, LL inlets, for ³/₄" hot and cold water connections.
- 6. Three (3) Fisher 22306 twist waste valve 3 1/2" x 2" with overflow and tailpiece. Provide 18 gauge S/S bracket for drain handle welded to sink bottom.
- 7. 12" deep single post perforated overshelf mounted at 18" above counter top.
- 8. 18 gaugebutt joint wall panel from splash to underside of shelf.
- 9. Post mounted utensil rack, extend 1-5/8" diameter S/S post from back splash, turn forward 12" and weld full length x 2" x ½" S/S bar with Component Hardware model no. V-77-4401 S/S sliding hooks at 8" on center. Verify height with Owner.
- 10. Omit front rail at disposer and sink compartments.
- 11. 16 gauge S/S undershelf as per drawings.
- 12. Flanged feet at front only of counter.
- 13. Anchor flanged feet to floor with non-corrosive bolts. Secure wall mounted equipment / components to in wall grounds or anchor plates. Coordinate installation with the general contractor.

ITEM NO. 250 DISHMACHINE - OF/CI

QUANTITY1

Manufacturer:HobartModel:CL44eN-BASSize and Shape:Refer to drawings

- 1. Dishwasher, conveyor type, single tank design, 202 racks/hour capacity, S/S construction, with automatic fill, auto timer, and 115 volt pilot circuit.
- 2. Prewired 15 KW Electric tank heat.
- 3. 480/60/3
- 4. Verify direction of dishmachine with drawings.
- 5. One (1) Year Extended warranty One (1) Year parts and labor.
- 6. One (1) Year Extended warranty on booster heater One (1) Year parts and labor.
- 7. Chamber height to be 6" taller than standard.
- 8. Individual connections for tank heat and controls.
- 9. Two (2) vent cowls with 4 x 16 vent and damper. Provide 18 gauge stainless steel seamless duct risers 6" above finish ceiling for final connection. The duct: trimmed at ceiling with 16 gauge stainless steel flange with all corners welded.
- 10. One (1) table limit switch with stainless steel cover to conceal back. Provided by Manufacturer / Installed by Div. 26.
- 11. Four (4) 20"x20" Peg racks.
- 12. Four (4) 20" x 20" sheet pan racks.
- 13. Two (2) 20" x 20" combination racks.
- 14. Vent fan controls.
- 15. Peak Rate of drain flow = 38 gpm. Division 22 to provide and install backflow preventor between booster heater and filter. Final connection by Division 22. Coordinate location of electrical disconnects on free wall.
- 16. Drain water tempering kit.

ITEM NO. 252 BOOSTER HEATER - OF/CI

QUANTITY1

Manufacturer: Hatco Model: C-30

Size and Shape: Refer to drawings

Alternate: ---

- 1. Compact booster heater.
- 2. One (1) Brass Pressure Reducing Valve with By-Pass.
- 3. 6" adjustable S/S legs.
- 4. One (1) Phosphate water treatment unit. System to be located in an accessible location.
- 5. One (1) Scaltrol HSC-100 water filter.
- 6. One (1) Shock Absorber.
- 7. S/S body and base.
- 8. Division 22 to provide and install backflow preventor between booster heater and filter. Final connection by Division 22. Interconnect to dishmachine by Division 22. Coordinate location of electrical disconnects on free wall. GC to insulate hot water from booster heater to dishmachine.

ITEM NO. 254 SOILED & CLEAN DISHTABLE - OF/CI

QUANTITY2

Manufacturer: Custom Fabricated

Model: ---

Size and Shape: Refer to drawings

- 1. Top: 14 gauge type 304 S/S 3" high 1-1/2" rolled rim at free sides. 10" high splash at walls.
- 2. Install Disposer as shown. Notch and punch splash turn back for vacuum breaker. 12 gauge S/S bracket mounted below counter top and polished to match top for disposer control panel.
- 3. Provide One (1) T&S model no. B-0133-EE pre-rinse, B-0108-C spray head, two (2) B-0109-04 18" long wall bracket (dealer to cut to correct length), one (1) additional spray face model no. 108SFRK with ceramic cartridges.
- 4. One (1) sink bowl with stainless steel rack guide.
- 5. Provide ½" slope in top towards dishmachine per the general specifications.
- 6. S/S cover to conceal table limit switch.
- 7. 2 1/2" backsplash at dishmachine portion, single thickness of s/s will not be accepted.
- 8. Anchor flanged feet to floor with non-corrosive bolts. Secure wall mounted equipment / components to in wall grounds or anchor plates. Coordinate installation with the general contractor.
- 9. One (1) Chicago model no. 305-VBRCF hose bibb and rack mounted on 12 gauge S/S flanged ground and polished to match top. Hose and spray nozzle by owner.

ITEM NO. 255 MOBILE UTENSIL SHELF - OF/CI

QUANTITY2

Manufacturer: Cambro

Model: Camshelving Premium Size and Shape: Refer to drawings

Alternate: ---

- 1. Four (4) tier, indleudes two (2) drop-ins and (1) cutting board/tray drying rack, built in Microban antimicrobial product protection.
- 2. Four (4) 75" high posts.
- 3. Two (2) no. 5MPX casters per unit.
- 4. Two (2) no. 5MPBX locking casters per unit.
- 5. Two (2) bottom shelves equipped with sheet pan drying rack assemblies.

ITEM NO. 614 FILL FAUCET - OF/CI

QUANTITY1

Manufacturer: T & S Model: B-0610

Size and Shape: Refer to drawings

Alternate: ---

- 1. Pot Filler Faucet, splash-mounted, 8" centers, vacuum breaker, flexible S/S hose, 60" long, hooked nozzle with self-closing valve, ½" IPS female inlets, built-in check valves.
- 2. 12" square 12 ga. S/S wall plate with hose rack with radius corners.
- 3. Install at 48" A.F.F. by Division 22. Coordinate height of backflow preventor with highest water level of associated equipment.

ITEM NO. 615 VIDEO MONITOR SYSTEM - OF/CI

QUANTITY3

Manufacturer: Owner Furnished/Contractor Installed

Model: ---

Size and Shape: Refer to drawings

Alternate: ---

- 1. Coordinate installation of Owner Furnished Menu Monitors.
- 2. 114000 to provide mounting brackets as required for ceiling mount or wall mount.

ITEM NO. 619 RECESSED GAS VALVE HOUSING - OF/CI

QUANTITY2

Manufacturer: Custom Fabricate

Model: --

Size and Shape: Refer to drawings

Alternate: --

- 1. 18 gauge S/S.
- 2. S/S piano hinge door.
- 3. Sleeve connections verify size and location.
- 4. Ansul gas valve to be mounted in housing prior to delivery to General Contractor.
- 5. **Special Instructions:** Coordinate location with Division 22.

ITEM NO. 646 CUP DISPENSER - OF/CI

QUANTITY1

Manufacturer:Dispense RiteModel:CTC-L-3SSSize and Shape:Refer to drawings

Alternate: ---

- 1. Stainless steel exterior.
- 2. Condiment tray mounted above each unit.

ITEM NO. 647 TEA/COFFEE BREWER - OF/CI

QUANTITY1

Manufacturer: Bunn

Model: ITB w/TDO 4 Dispenser Size and Shape: Refer to drawings

- 1. Tea/Coffee Brewer with Tray, dual voltage adaptable.
- 2. Digital readout displays in English/Spanish/French.
- 3. Infusion Series technology: (3) brew buttons & (2) batch sizes, BrewWISE® intelligence with pre-infusion & pulse brew, energy-saver mode, brew counter.
- 4. Includes integrated (3) position flip tray, overlay kit for customization.
- 5. USB programming capable.
- 6. Three (3) TDO-5 Brew Thru Reservoir, Two 2.5 Airpots.
- 7. Inline Everpure water filter size per equipment requirements. Located under counter.
- 8. Dormont Water quick disconnects.
- 9. Locate per drawings.
- 10. Provide cord and plug. Coordinate NEMA configuration with Division 26.
- 11. Interconnection thru water filter to tea brewer and final connection by Division 22.

ITEM NO. 651 ICE DISPENSER - OF/CI

QUANTITY1

Manufacturer: Servend Model: M45

Size and Shape: Refer to drawings

Alternate: ---

- 1. Lighted Merchandiser
- 2. Cord and plug assembly, coordinate NEMA configuration with electrician.
- 3. S/S exterior
- 4. **Special Instructions:** Plumber to extend drain line to floor drain.

ITEM NO. 676 GAS STEAM TILTING KETTLE - OF/CI

QUANTITY1

Manufacturer:ClevelandModel:KGT-6-T/ST-28Size and Shape:Refer to drawings

Alternate: ---

- 1. Table top, 6 gallon capacity
- 2. Manual tilt.
- 3. Support console on right, 2/3 jacket, 304 S/S construction.
- 4. One (1) ST-28 support stand with drain basket.
- 5. Kettle brush kit.
- 6. Cooking Baskets
- 7. Spray Hose.
- 8. Lift off cover.
- 9. Self locking hand tilt mechanism.
- 10. Protective control panel.

END OF SECTION 114000