

Garrett Morgan Main Kitchen

Food Service Equipment Purchase and Install Specifications

SECTION 11 4000 - FOOD SERVICE EQUIPMENT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. All Drawings, General and Supplementary Conditions, Division 1, Specifications, and related contract documents apply to this section and the requirements may exceed those shown in this section. The Food Service Engineering Consultants on this project are JRA Food Service Consultants, LLC in Grand Rapids, Michigan (616-454-4433) and is responsible to the Architect and Owner for ascertaining that the Food Service Equipment Contractor complies with all the requirements of this section.

1.02 SUMMARY

- A. As listed in this division, the Food Service Equipment Contractor shall furnish all labor, material, work, equipment, transportation, accessories, taxes, etc. for a complete and continuous installation in accordance with the requirements of these plans and specifications and related documents.
- B. The FSEC shall familiarize themselves with local conditions affecting the cost of the work and examine the site and all Food Service Equipment contract documents including Architectural drawings, and contract documents, all of which constitute the responsibility of the FSEC.

1.03 SUBSTITUTIONS AND VOLUNTARY ALTERNATES:

- A. The first manufacturer of equipment listed in the item specifications is intended to be the basis of the base bid. All other manufacturers must conform to the specifications, size, accessories, materials, capacity, etc.
- B. A proposed substitution on any specified equipment must be submitted to the Consultant 10 days in advance of the bid date and must include all manufacturers shop drawings and data sheets on the proposed equipment. The supplier shall pay any additional costs incurred for changes, engineering services, utilities, construction, etc. that may be incurred by said substitutions.

1.04 INTERPRETATION OF DOCUMENTS:

- A. Prior to receipt of bids, all questions, clarification, and changes in the documents shall be executed by addendum. After award of contract, all changes shall be performed by bulletin.
- B. FSEC shall submit an itemized price breakdown to the Consultant on their letterhead for each piece of equipment including labor, freight, manufacturer, quantity, taxes, etc. as applicable.
- C. Any deletions of equipment by the Owner and/or Consultant prior to approval and/or release of the shop drawings, brochures, etc. shall be credited to the Owner at the itemized price as listed in the itemized price breakdown and include all equipment costs, freight, labor, taxes etc. Pricing shall not be credited at the amount listed on the Schedule of Values.
- D. Any additions to equipment by the Owner and/or Consultant that result in cost increases after approval and/or release of shop drawings, brochures, etc. shall be immediately noted by the FSEC and a written request with prices for a bulletin shall be issued by the FSEC to the Consultant.
- E. The General Specifications are applicable to items listed in the item specifications.

1.05 ABBREVIATIONS

- A. The following abbreviations are used herein unless otherwise noted on the plans or item specifications.

A	Amps
AFF	Above Finish Floor
BTC	Branch To Connection
CFM	Cubic Feet of Air Per Minute
C.P.	Chrome Plated
CW	Cold Water - 25 PSI
DCO	Duplex Convenience Outlet - 20 amp
DFA	Drop From Above
E.C.	Electrical Trades
FL DR	Floor Drain - Wade W1104
FFD	Funnel Floor Drain - Wade 1104-EF4
FL SK	Floor Sink - 12" - Wade W9144-15
FPM	Feet Per Minute
FSEC	Food Service Equipment Contractor
F.S.C.	Food Service Consultant
G	Natural Gas - 7" water column
GP	General Purpose
G.S.	General Specifications
G.C.	General Trades
HVAC	Heating Ventilation HVAC Trades
HP	Horsepower
HW	Hot Water - 140 degree - 25 PSI
J.B.	Junction Box
KW	Kilowatt
N.S.R.	No Service Required
N.I.C.	Not in FSEC contract
P.C.	Plumbing Trades
S.O.M.	Standard of Manufacturer
s.s.	Stainless Steel
SS	Steam Supply - 25 PSI
SR	Steam Return
V	Volts
VIF	Verify in field
W	Waste Outlet
W.G.	Water Gauge - Static Pressure

1.06 CONFORMITY

- A. All equipment furnished under these specifications shall be newly manufactured and installed in strict conformity with all codes, regulations and requirements of the State Board of Health, the National Sanitation Foundation Standards, or any state or local agency.
- B. All equipment shall conform to the current standards and bear the seal of UL, NEMA, ASME, AGA, OSHA, NFPA, etc. where applicable and/or otherwise conform to the requirements of the authorities having jurisdiction.
- C. Wherever the requirements of the specifications and drawings are in excess of the regulations, the specifications and drawings shall govern. Whenever the regulations are in excess of the specifications and drawings, the regulations shall govern.
- D. Wherever the requirements of the specifications are in excess of the drawings, the specifications shall govern.
- E. Wherever the requirements of the drawings are in excess of the specifications, the drawings shall govern.

1.07 PERMITS - LICENSES - PHONE CALLS

- A. Provide to the proper authorities all notices required by law, obtain all refrigeration permits, licenses, etc., and pay any legal fees necessary for the due and faithful performance of the work, and which may arise incidental to the fulfilling of the foodservice documents. The Owner shall pay for any health department plan review or license fees.
- B. Permits shall be provided as required. Refer to the Construction Managers scope of work.
- C. Accept all collect phone calls relating to food service equipment that pertain to the project until warranty has expired on the equipment.

1.08 SUBMITTAL OF BUYOUT BROCHURES AND SHOP DRAWINGS

- A. Shop drawing and brochure requirements may also be listed in the general requirements or other areas of the documents. Provide submittals as per those requirements or as listed below - whichever is greater.
- B. All shop drawings, rough-in drawings, equipment brochures, etc. shall be submitted at one time within 20 days of the notice to proceed. Said items are subject to the terms and conditions of the plans and specifications for the entire project. All drawings which are submitted for distribution shall be clear and concise and have the following notes printed on each and every sheet:

Name of the F.S.E.C.
Name and location of the project.
Name of the Architect.
Name of the Consultant.
Name of the General Contractor.
Drawing number.
Date of drawing and revisions.

The following statement: The (name of F.S.E.C.) is solely responsible for the accuracy and completeness of these drawings and specifications, and we approve them for construction purposes. Signed: (Officer, Partner, etc.)

- C. All submitted data shall be reviewed for general compliance only and does not alleviate the F.S.E.C. from providing equipment as per the intent of the plans and specifications.
- D. Owner shall not be responsible for any equipment ordered or prior to receipt of Consultant approved brochures or shop drawings.
- E. If applicable, the F.S.E.C. shall visit site to verify requirements of existing or relocated equipment prior to submittals.

1.09 BUYOUT BROCHURES:

- A. As soon as possible, prepare a buy-out equipment brochure in PDF format with copies of manufacturer's specification sheet or literature on each item, along with a list of the model, manufacturer, quantity, connections required, accessories, etc. for each item and component or accessories. Material on all items shall be assembled in order and no consideration will be given to partial lists submitted from time to time.

1.10 ROUGH-IN DRAWING AND MECHANICAL DATA:

- A. As soon as possible, submit an electronic drawing in PDF format at 1/4" scale to locate accurately the utility connections for each item of equipment requiring water, gas, electrical, and drain. Listed on the drawings shall be dimensions to required utilities and located from a center line of a structural column or another positive reference point.

- B. Upon final approval of data, distribute copies to all trades, Owner, Architect, health department, etc. as required.
- C. Drawings shall be at 1/4" scale or larger and indicate each electrical and mechanical roughing-in required for all new and/or relocated or future or purveyor supplied (the Owner shall provide proper data on purveyor supplied equipment) food service equipment as listed in the plans or specifications. Include all electrical and convenience outlets, gas, water, steam, ventilation, drains, floor depressions, wall openings, weights, ceiling recess or access panels, sleeves, beverage lines, roof data, refrigeration, etc.
- D. Furnish all necessary assistance to the various trades and be responsible for the proper location of sleeves and conduits through which the utility lines are to be drawn. A field inspection shall be made before the finished floors are laid to make any necessary relocations of the utility sleeves, rough-ins and conduits, and immediate written notice shall be provided if rough in problems have occurred.

1.11 SUBMITTALS OF SHOP DRAWINGS:

- A. Completely detail and submit shop drawings (s.s. fabrication, fire protection, ventilation, plastic laminate fabrication, walk ins, sneeze guards, cafeteria serving counters, hoods, etc.) in electronic PDF format showing all items to be provided under this section of the specifications. Drawings to be submitted for review at 1/2" per foot scale or larger. Upon final review of data, distribute copies to all trades, Owner, Architect, etc. as required.
- B. The drawings shall show all elevations, sections, dimensions, mechanical and electrical requirements, related details of construction, installation and related work which require cutting, close fitting, etc. as required for installation.
- C. Submit proper notifications in writing of any departures from the contract drawings or specifications which may be necessary to permit installation of the equipment. Fabrication should not be started until after final approvals are received and final field measurements are taken.

1.12 MAINTENANCE MANUALS

- A. At time of demonstration, provide to the person in charge of the kitchen a minimum of three bound current copies of kitchen plans, roughing-in drawings, any and all warranties, instructions, parts lists, operating instructions for each piece of mechanical equipment, as built shop drawings, and "Buy-Out" brochures.
- B. Manuals shall include a typewritten list in the front of the manual listing the names, addresses, and telephone numbers of local servicing agencies and manufacturer's representatives for all equipment.

1.13 SAMPLES

- A. Submit all required samples for approval, if required, of all hardware, plastic laminate, paint, etc. before starting fabrication. Other samples shall be supplied as required.

1.14 MEASUREMENTS

- A. Measurements required to size and place the food service equipment shall not be taken from drawings but shall be made at the structure from the actual spaces reserved therefore, and giving due consideration to any architectural, structural or mechanical discrepancies that may occur during construction of the building. Verify size of all of Owners equipment and small wares (dishes, trays, pans, etc.) and Purveyor supplied equipment (urns, soda systems, beverage dispensers, etc.), if applicable. Field dimensions shall be taken at the earliest opportunity so as not to delay deliveries.
- B. Verify in field any and all measurements before doing any work on equipment that may be

affected by the physical conditions and be responsible for the correction of same.

- C. Inspect equipment for proper operation prior to relocation. Advise if equipment is defective or needs rework which is not included in the original contract and submit a written quotation for said work.
- D. Coordinate Owners and/or Purveyor supplied equipment (coffee makers, beverage equipment, cash registers, soda equipment, etc.) as required for rough-in data, installation, etc.
- E. Measurements for tight fitting equipment shall allow no more than 1/4" between wall and equipment that shall be trimmed and/or sealed as required.

1.15 WARRANTY

- A. Provide a written warranty for all equipment against defects in workmanship and material for one (1) year from date of substantial completion and acceptance, excluding refrigeration units which shall carry an additional four-year warranty and a ten-year warranty on all walk-in panels. This shall cover any replacements and/or repair costs of such defective material, including transportation, labor, and materials for all equipment. This one-year free service, warranty and guarantee shall be available within 24 hours of notification on all equipment except refrigeration.
- B. Provide one-year free service, warranty and guarantee within 12 hours of notification on walk-In refrigeration and units must be operational within 24 hours after service call.
- C. This warranty is not intended to cover equipment which has been overly abused or items that have not had proper periodic maintenance (door gaskets, uncleaned refrigeration condensers, etc.) during the one-year period.

1.16 DELIVERY AND STORAGE

- A. Furnish all labor, material, equipment, etc. as required to unload and store all equipment.
- B. No equipment shall be delivered to the site unless it has been ascertained that storage space is available.
- C. Make all arrangements to deliver, unload, and store all equipment and shall assume all responsibility for safeguarding the equipment until it is accepted by the Owner.
- D. Unless noted in the item specifications, remove and store any existing and/or relocated equipment that is removed from the kitchen during the construction period.

PART 2 - GENERAL SPECIFICATIONS - PRODUCTS

2.01 MANUFACTURER'S STANDARDS

- A. It is the intention of these specifications to provide a type of equipment conforming to manufacturer's standards and only minor variations in construction will be accepted, provided that these variations do not detract from the finished appearance, durability, general function or in any way affect general overall size, capacity, strength, etc. of equipment.
- B. Manufacturer's catalog designation of material and/or fabricated equipment used in the following specifications are intended to illustrate and represent the standards which will be required by the owner. Equipment furnished must closely conform thereto in design, construction, capacity, and function to make and model called for. Where such catalog designations are given, the items shall be complete as described and shown in the catalog unless exceptions are in itemized specifications.
- C. When more than one manufacturer is listed in the Item Specification, only one manufacturer

shall be acceptable for items of a similar nature (fabrication, cooking equipment, refrigerators, shelving, carts, etc.) to insure uniformity of design, installation, service, etc.

2.02 FABRICATION STANDARDS

- A. Unless noted under itemized specifications or on plans, the following specifications shall govern the construction of all fabricated and buyout equipment and installation and shall apply to the individual item as if it were written therein in its entirety.

2.03 FABRICATED EQUIPMENT

- A. It is required that all custom fabricated items (counters, tables, sinks, dish tables, etc.) described in the plans and specifications, other than by name and catalog number, be constructed of 300 series stainless steel and be manufactured by one fabricator (Metal-Masters Inc, Advance Tabco Co., Kevry Co., SSP Co., LTI Co., John Boos, Keystone Co., Titan Co. and McCallum Co. are approved fabricators) with the plant, personnel and engineering facilities to properly design, detail, and manufacture high quality kitchen equipment.
- B. All work in the above category shall be standard unit assembly, by one foodservice equipment manufacturer of uniform design, material and finish.

2.04 BACKSPLASHES

- A. Where edges of the top are adjacent to walls, column, equipment or enclosures, they shall be turned up to provide a backsplash which shall be tight fitting (1/4" or less). Unless noted, all backsplashes shall be formed by turning up 10" and flanged back 2-1/2" at 45 degrees and down 1" and attach to wall with 6" by 2" s.s. "Z" clips on 3'-0" centers. Ends of backsplash shall be fitted with closure plates. Weld a full s.s. enclosure panel for exposed rear backsplash.
- B. Tops adjacent to refrigerators, ovens or cabinets shall be turned up 4" with top edges feathered slightly to form a tight fit of 1/4" or less. Seal with mastic compound.

2.05 BOLTS, SCREWS AND RIVETS

- A. All exposed surfaces of equipment shall be free of bolt, screw and rivet heads. Wherever bolts are used to fasten tops and trim to paneling, body of counters and similar equipment, such bolts shall be of an approved type and shall be corrosion resistant metal of the same alloy as the metal to which they are fastened with acorn type nuts to eliminate sharp edges.

2.06 CASTERS

- A. Provide heavy duty casters with double ball bearing raceways, heavy gauge fork and races and have minimum capacity of 250 pounds per caster. Casters shall be provided with brakes. Wheel shall be non-marking urethane.

2.07 CODES AND SANITATION

- A. All food service equipment under this contract shall meet the requirements and bear the label of the National Sanitation Foundation. Specifications set forth are considered minimum and are to be superseded by any superior requirements in effect as of this date by the National Sanitation Foundation or the State Health Department. Any differences of opinion on sanitation shall be referred to the State Health Department for arbitration.

2.08 CORNERS

- A. All corners shall be fully rounded and made integral and of the same sheet as the top and rolled edges. Radii of all rolled edges to be equal and rolled 2" diameter at least 180 degrees. Filler pieces or soldering shall not be used in place of all welded, seamless construction.

2.09 CUTTING BOARDS

- A. Provide Read Products or Mapletex Co. 1/2" minimum thick reversible boards as per plan as manufactured by Read Products Inc. when attached to grills or similar equipment, provide s.s. mounting brackets.

2.10 DISHTABLES

- A. Provide NSF approved series SC-DT dish tables with 14 gauge 304 s.s. coved corner construction as manufactured by Metal-masters Co. or equal with 10" backsplash as previously specified where adjacent to walls and remainder of tables to have 3" high roll rim and be mounted on 12 gauge under-channeling, 16 gauge s.s. cross rails and legs with s.s. gussets and s.s. adjustable bullet feet and/or flange type feet. Tops shall be pitched to dishwasher to avoid standing water and undersides shall have sound deadening material and be attached to walls with s.s. "Z" clips.
- B. Provide removable 18 gauge s.s. under-shelving which has 2" rolled up edges at rear and roll down edge at front and be supported on s.s. cross rails on all sides. Notch all corners to fit legs and piping. Under-shelving shall not interfere with booster heater or adjacent equipment.
- C. Provide s.s. recessed drain trough with drainer in all soiled dish tables. Unit shall not interfere with dishwasher control panels or adjacent equipment.
- D. Disposer cones and/or scrapping trough shall be integrally welded into top and also provide s.s. brackets for switch and holes in backsplash return for vacuum breaker. Trough shall be size and shape as per plan by 6" deep with coved corner construction and sloped to disposer. Provide 20" long s.s. pan formed removable trough covers. Provide T&S Co. 2905 water inlet at shallow end of trough and every 3'-0" and at change in directions. Inlets shall be controlled by a 2600 mixing valve mounted on a s.s. bracket mounted under dish table and be interconnected to water line and solenoid so water flows thru inlets when disposer in operation.
- E. Provide integral s.s. pass thru sill extending thru wall as per plans and specifications with flat side splashes and turn down front with closed ends. Provide 1" rear turndown at table at 30 degrees so sill is higher than dish table. Provide wood bracing on sill as required for support. Verify requirements of roll up door by prior to installation of tables.
- F. Provide raised roll rim in lieu of 3" high roll rim at front edge of soiled dish table when used as a pass thru dish deposit area.

2.11 DOORS:

- A. SLIDING DOORS - Sliding doors shall be constructed of 16 gauge s.s. or material listed in the item specifications with roller bearing slides.
- B. SINGLE PAN - Construction, 16 gauge s.s. with 3/4" thick sound deadening fiberglass between the two thicknesses of metal. Back panel to be 20 gauge steel. Door to operate on top hung ball bearing rollers. Bottom edge of doors to be square and fitted with a groove that rides over a s.s. pin at center point.
- C. All doors shall be fitted with stops and locks. Handles shall be die stamped s.s. flush mounted.
- D. HINGED DOORS - All hinged doors for cabinet bodies and enclosed bases shall be double pan construction. Doors shall be flush mounted and be fitted with s.s. piano type full length hinges. They shall be furnished with friction catch and s.s. recessed handles, locks, and two rubber button noise eliminators, one at each corner on handle side.

2.12 DRAWERS:

- A. All drawer inserts shall be coved corner die stamped out of one piece of 18 gauge s.s. or plastic and shall set loosely in a channel frame so it can be lifted out for cleaning. Top edges are to be flanged out 1/2".
- B. The supporting frame shall be welded steel channel with s.s. drawer face welded to frame so there will be no exposed screws or rivets on the face which shall extend 3/4" out at top and down 3/4" with 1/2" hemmed edge and radius corners to form drawer handle. Provide two rubber button shock stop noise eliminators one on each side of the drawer face at the top.
- C. Provide heavy duty s.s. drawer slides with heavy duty s.s. ball bearing wheels. Slides and frame to be so designed as to allow full opening of drawer and to be reinforced to support 150 lbs. when fully extended.
- D. Adjustable stops are to be provided for each drawer at the fully open position. Drawers on open base tables shall be enclosed in an 18 gauge housing of steel. Drawer guides are to be sloped to provide self-closing action.
- E. All drawers shall be 20" by 20" by 5" deep.

2.13 FIELD JOINTS:

- A. All field joints shall be welded with rod of same basic composition as sheets or parts welded. Welds shall be free of pits, cracks, cross graining or discolorations and shall be ground and polished to the original finish of the metal. No soldered or bolted joints shall be used unless noted in item specifications and shall be properly sealed and bolted.

2.14 GRINDING AND POLISHING:

- A. All exposed welded joints shall be ground flush with the adjoining material and neatly finished to harmonize therewith. Services shall be free of depressions. Wherever sheared edges occur, they shall be free of burrs, projections and fins to eliminate all danger of cutting or laceration when the hand is drawn over such sheared edges. Where miters or bull nosed corners occur, they shall be neatly ground to a uniform condition, and in no case will overlapping material be acceptable. All exposed surfaces shall be satin finish except rim which shall be a highly polished and buffed finish. Satin finish shall be comparable to the commercial mill finish known as No. 4 for s.s. No cross graining on equipment is acceptable.

2.15 GUARDS

- A. All machines shall be furnished fully enclosed with guards built in accordance with safety codes and regulations of State or Governmental agency having jurisdiction.

2.16 INTERIOR SHELVES:

- A. All interior shelves in cabinet bodies and enclosed bases shall be 18 gauge s.s. or as called for in the itemized specifications. Turn up on back and ends of shelf shall be 1-1/2" high and coved on 3/4" radius. The front edge shall be turned down 1-1/2" and back 1/2". All shelves shall be rigidly reinforced below to prevent sagging. Provide ferruled cutouts in shelves for drain lines, conduits, etc.

2.17 LEGS - FEET - FRAMES:

- A. All legs and pipe stands for open base tables, dish tables, etc. shall be constructed of 16 gauge s.s. tubing unless noted, with cross rails and braces of the same materials. All joints between legs, under-shelves and cross braces are to be welded and ground smooth.
- B. Cross rails must be supplied to reinforce each leg. Legs anchored to gussets at top only and without cross rails are not acceptable. Pipe stands and frames furnished on all pipe base fixtures shall have legs of 1-5/8" O.D. 16 gauge s.s. tubing, cross rails of 1" O.D. 16 gauge s.s.

tubing unless noted.

- C. Top of stand shall be fitted into s.s. gussets welded to reinforcing structure on underside of the table top, spaced not over 3"-6" on centers.
- D. All legs shall be fitted with adjustable s.s. bullet shaped feet with bottom of pipe legs to be finished off smoothly and overlap the stem to provide sanitary fitting and prevent the accumulation of grease or other debris at this joint. Provide s.s. flange type feet securely anchored for island style counters, sinks, etc.
- E. All pipe legs or vertical members are to be set back from edge of table tops a sufficient distance to offset any interference with workers, walls, columns or other equipment.
- F. Provide 6" adjustable legs with adjustable s.s. bullet foot for fabricated and/or buyout equipment with minimum capacity of 1500 pounds each.

2.18 MATERIALS AND STRUCTURAL SHAPES:

- A. Angles, bars, channels, piping, pipe legs, etc. used shall be uniformly ductile in quality and free of hard spots, runs, checks, and other surface defects. Except as otherwise specified, all such sections shall be milled steel galvanized by the hot dip process, all free of runs and blisters, uncoated spots or patches. S.S. shall be 18-8 composition (302 alloy) standard with No. 4 finish and polished to 180 grit and welded as previously specified. Provide butyl sealant sound deadening between tops and all structural supports or as required.

2.19 NAME PLATES

- A. Each item of equipment shall have a corrosion resistant metal name plate with model number, serial number, name and address of the manufacturer securely fastened to equipment in a non- conspicuous area. All mechanical and electrical controls, switches, disconnects, remote compressors, etc. shall be labelled with metal or engraved phenolic plastic signage.

2.20 OVERSHELVES AND WALL SHELVES:

- A. Provide 10" wide NSF 16 gauge s.s. over-shelves or wall shelves unless noted in the plans or item specifications. Provide wall mounted shelves with rear and sides to be turned up square 1" and front edge to have sanitary roll rim. Provide heavy gauge s.s. wall mounting brackets 6" from ends of shelf with maximum of 4'-0" on centers.
- B. Provide all over-shelves with sanitary rolled edges and bull nose corners on all four sides unless equipment is mounted on shelf (microwave, toaster, dishes, etc.) and provide 1/2" turn up at rear for that portion of the over-shelf. Provide s.s. tubular support standards as required for shelf mounted equipment and with provisions for mounting to table or counter top.
- C. Provide all wall backing and/or structural support as required for shelves to support 50 pounds per square foot and coordinate installation of same with trades.

2.21 PAINTING

- A. All galvanized material and black steel shall be thoroughly cleansed of all oil and foreign matter and given two (2) coats of enamel paint as selected.

2.22 ROLLED RIMS AND EDGES

- A. Standard roll rim shall be coved up 3" with 1/2" diameter roll at 180 degrees and bullnose corners.
- B. Square edge shall be turned down 2" at 90 degrees with 3/4" tight hem at bottom.
- C. Marine edge shall be turned up 1/2" on a 45 degree angle and turned down 2" with 3/4" tight

hem at bottom.

- D. Wherever table tops are used in connection with sinks, the top shall be fabricated with a 1/2" high raised roll rim spillage edge unless otherwise specified. Top to be integrally raised approximately 1/2" at all edges and then rolled down 2" at 210 degrees with bull nose corners.

2.23 REINFORCED STRUCTURES:

- A. Counter, table, and cabinet framework shall be constructed of steel angles horizontally and channels vertically, made in sections to permit assembly on job with tops field welded. Vertical fronts and sides of cafeteria counters and similar enclosures are to be reinforced with channels on approximately 3'-0" centers to support the tray slide brackets.
- B. Unless otherwise specified, angles or channel frames and similar cross bracing on not over 2'-0" centers to be provided under all counter and table tops to stiffen tops and furnish fastening supports for leg flanges.

2.24 SINKS:

- A. Provide 14 gauge s.s. coved corner sink bowls integrally welded as per plan with welded seamless construction with scored bottom towards a die stamped drain outlet with a Fisher lever handle waste and connected overflow located 1" below drain board and shall not interfere with plumbing, adjacent walls, equipment, etc. Provide 14 gauge s.s. bracket for drain stem. All multiple compartment sinks shall be double walled construction. When sinks are built into enclosed base counters, provide access holes for lever waste handle stem.

2.25 TABLE TOPS:

- A. METAL - Metal table tops to be 34" high and be constructed of 14 gauge 302 s.s. with NSF roll rim construction and bull nose corners unless otherwise noted. All seams and coved corners shall be welded, ground smooth and polished. Provide ferruled access holes for cutouts for water lines, cords and plugs, etc. as required in table tops, counter tops, urn stands, etc. All open base tables shall be reinforced with 12 gauge angles or channels. Provide welded cross angle or channel members shall be placed at each pair of legs with gussets, welded cross rails and feet as previously specified.
- B. One angle runner, running lengthwise shall be provided on tops up to 30" wide; two provided on tops over 30" wide. All tops shall be reinforced so that there will be no noticeable deflection and all reinforcements shall be stud welded to the underside of the top. No rivets or bolts to be used through the top. Provide sound deadening material between tops and reinforcing members and underside of tops. Field joints are to be provided in the top where necessary.

2.26 UNDERSHELVES:

- A. The under-shelves on open base tables, dish tables, etc. shall be a solid removable 16 gauge s.s. shelf unless noted in the itemized specifications. Shelf is to be turned up at rear and down on all front and side (down on all island units) edges 1-1/2" with corners at legs cut out and mounted on the support stringers on all four sides. Provide ferruled access holes as required for drain lines, water lines, conduits, etc.

2.27 WALK INS AND REFRIGERATION

- A. Provide NSF and UL approved walk ins as per the item specifications size and shape as per plan by 8'-6" high and furnished with prefabricated modular construction tongue and groove cam lock style panels for walls with coved vinyl screed, ceilings, and floors with 4" foamed in place UL-25 flame spread class No. 1 urethane insulation with a minimum "R" factor of 32 and a "K" factor of 0.121. Wall and ceiling panels shall have 0.040 stucco embossed aluminum or 20 gauge 304 s.s. finish and floor panels shall be 0.100 smooth aluminum or 18 gauge s.s. with a rating of 700 pounds per square foot with non-skid floor strips. All panels shall have a ten-year guarantee and be installed with a watertight seal. Provide 4" s.s. high coved base

molding at all exposed exterior and interior walls securely anchored and sealed as required. Provide ceiling hangers and structural supports as required.

- B. If floorless construction is required refer to the Construction Manager scope of work. Provide 4" urethane insulation and vapor barriers for sub floor and tile floor. Provide coved floor screeds below wall panels anchored to red wood vapor barriers which shall extend up thru and 1/8" above the level of the finished floor, 6 mil polyethylene vapor barrier, etc. as per the manufacturers standard requirements. Supply and coordinate installation of walk-ins to assure proper fit of floor recesses, sizes, tile, insulation, grout, vapor barriers, drainage, etc.
- C. Provide one surface mounted LED light fixture mounted above door for the first 50 square feet of floor space and one additional ceiling mounted fixture as shown on the plans. Lighting shall provide a minimum of 35 foot candles at 36" above floor. The light above door shall be inter-wired to switch and junction box, but all additional lights shall be installed and wired in field with conduit located outside the compartments.
- D. Provide 36" by 78" in-fitting doors with magnetic gaskets, three C.P. cam lift hinges, s.s. front, 24" high interior aluminum tread plate kick plate, cylinder locks, and automatic door closer. Doors shall be mounted in reinforced panel with FRP or s.s. door jambs with thermal break and thermostatically controlled heater strip, s.s. heavy gauge heated threshold, safety release, digital thermometer, and virgin plastic full width door curtains mounted 6" above door header. Provide non heated relief air vents for cooler and inter-wired heated vents for all freezer compartments mounted above doors.
- E. Provide removable closure trim with concealed fasteners of same appearance as walk-in exterior from box to all adjacent building walls and ceilings. Provide access panels and louvers as required for service.
- F. Refrigeration systems shall be complete with items as specified or as required to provide a first class system. Should any dispute arise as to the quality of equipment or workmanship, the decision shall rest with the Consultant.
- G. Hermetic or scroll compressors shall be mounted on anti-noise, anti-vibration blocks, and be factory mounted in welded angle iron frame and housing with support rails, metal curbs, timed defrost, factory installed control panel, pilot light, NEMA rated disconnects and starter, etc. Compressors to be factory pre-connected for final water and electrical connections. Verify that proper ventilation of compressors is obtained.
- H. Provide coil and/or compressor condensate drain lines as required and shown on the drawings. Provide drain lines terminating with trap over floor drain where shown. Drain lines to be neatly insulated with material similar to Armaflex. Any drain line run through a freezer compartment shall also have a heater coil neatly wrapped over the line, prewired and shall operate continuously. No drain piping shall interfere with shelving within the compartment nor exit through the front of a compartment. All piping shall be concealed where possible.
- I. Coils shall have timed defrost and immersion type thermostat and be connected to compressors by equipment supplier using type "L" copper tubing soldered using industry acceptable refrigerant. Refrigeration lines shall be insulated in same manner and materials as coil and drain lines and shall be concealed where possible.
- J. Provide refrigeration system with expansion valves, pressure controls, strainers, solenoid valves, liquid dryers, adjustable room thermostats, hangers, king and queen valves, heat exchangers, oil separators, pump-down solenoid, low ambient controls, crankcase heater, outdoor shroud, shut-off valves, sleeves, sight glass with moisture indicator and all other items necessary for a complete system.
- K. All electrical components within each compartment shall be pre-wired by supplier to junction box on exterior top of compartment. Make final connections and inter-wire to lights and from walk-in coils to compressor for timed defrost in conduit as required.

- L. After final connections, evacuate, pressure test, charge, start up and operate system for a period of three (3) days and make all necessary adjustment of controls as required. Operate coolers at 35 degrees and freezers at -5 degrees unless noted on plans. Provide manufacturers five-year compressor warranties and one-year free service available within 12 hour notification.

2.28 WATER INLETS:

- A. Water inlet locations shall be located above positive water level to prevent syphoning of liquid into the water system.
- B. Wherever conditions require water inlet placed below water level, a suitable pressure type syphon breaker or double check valve shall be placed on fixture to form a part of same to prevent back syphoning.
- C. Exposed syphon breakers shall be chrome plated units with chrome plated piping and slip flanges where exposed.

2.29 MECHANICAL/ELECTRICAL MATERIALS REQUIRED IN FOOD SERVICE CONTRACT:

- A. The equipment supplier shall include materials properly labelled and packaged as follows:

- B. PLUMBING APPURTENANCES:

1. Check requirements for gas, water, steam, etc. on job before ordering equipment. Information shown on drawings or specifications does not relieve contractor of this responsibility.
2. Faucets, pre-rinse units, lever wastes, vacuum breakers, to be as manufactured as described in the item specifications.
3. Except as otherwise specified, provide each sink compartment with deck type or backsplash type faucet with minimum 12" swing spout soft flow. Where multiple sink compartments are provided, faucets may be located between compartments.
4. C.P. brass overflow fittings shall be 1-1/2" tubing fully connected to sinks at factory with lever handle quick opening wastes with tailpieces on each sink compartment.
5. Provide all solenoids, C.P. atmospheric or pressure type vacuum breakers with C.P. stems above counter tops, shock absorbers, check valves, mixing valves, gas regulators, etc. required by code or for proper operation of equipment with mounting brackets as required. Valves shall be installed where required, accessible and convenient to the operator.
6. Provide swivel gas hoses assemblies 36" or of proper length as required with quick disconnect, ball valve, caster floor locks and 3000 pound coiled restraining device, and wall brackets.
7. All steam equipment shall have valves provided with heat resistant handles, traps, gauges, etc. as required for proper operation

- C. ELECTRICAL APPURTENANCES:

1. Check voltage on job before ordering equipment. Information shown on drawings or specifications does not relieve contractors of this responsibility.
2. Except where noted under item specifications, current characteristics for motors 3/4 HP or less, solenoid valves and lighting shall be 120 volt, single phase, 60 cycle, A.C. Unless otherwise noted under item specifications, motors 3/4 HP and over shall be wound for 208/240 volts, three phase, 60 cycle, A.C.

3. Provide 120 volt control circuit on all equipment that operates on voltages on or over 208 volt. All equipment requiring 120 volt control circuits (120/480 volt, 120/208 volt, etc.) shall have transformers pre-wired on equipment.
4. Cords and plugs and receptacles for equipment shall be three or four wire all rubber coiled retractable style cord with ground as required and match receptacles provided and as best suited for the equipment. Units shall be mounted in NEMA type enclosures as per code with s.s. faceplates and boxes where receptacles are exposed.
5. Thermostats, unless otherwise noted on plans or in the item specifications, shall be provided at all equipment (bain-marie, urns, dish machines, hot food table, warming cabinets, etc.) with thermostatic control.
6. Heating elements to be of voltage and phase as specified or as required to suit job.
7. Controls, thermostats, switches, contactors, low water cut off, light fixtures and bulbs, etc., necessary for the installation and proper operation of equipment shall be furnished as required along with all starters and/or motor control switches for the proper function of the equipment specified. Controls mounted on vertical surfaces shall be recessed.
8. Controls that are an integral part of equipment shall be factory installed. Controls which are to be separately mounted shall be shipped loose for field installation. Coordinate all field installation so as to not interfere with access and/or operation.
9. Provide properly sized magnetic starters line voltage type with thermal overload relays and reset for normal operation by automatic control or pushbutton station for 208/240 volt control. Enclosures shall be general purpose NEMA type 1, A.C. voltage, unless located outdoors which will require a waterproof enclosure. Remote control motors shall have magnetic starters.
10. Disconnect switches shall be type non-fusible, single throw, heavy duty industrial, quick make, quick break. Circuit breakers may be used in lieu of above disconnects as per code.
11. Provide equipment with required internal wiring between elements, switches, motors, receptacles, starters, etc. complete to a junction box. Disconnect, starter, etc. as required and are to be "left ready" for final connections. All control circuits shall be 120 volt to ground.

PART 3 - GENERAL SPECIFICATIONS - EXECUTION

3.01 INSTALLATION AND MATERIALS:

- A. All work required under this section shall be installed by the proper trades having jurisdiction in this area concurrent with job progress, Construction manager scope of work and related field conditions. Such installation shall be under the direction of a competent supervisor. A site inspection is recommended prior to bidding if applicable.
- A. Provide for the conveyance, uncrating, erection, assembling, setting in place, trim, cutting of holes and ferrules in equipment for piping, drains, electrical outlets, etc.
- B. Coordinate installation with all trades, repairing of any damage done to equipment during installation, removal of debris created by installation, startup, testing, and cleaning of all equipment (new, existing, or relocated).
- D. Where necessary to move equipment to make final connections, coordinate and assist all in moving equipment and be on the job to carefully level and adjust equipment as the connections are being made. During installation, coordinate with all trades on connection details and be responsible for meeting the individual equipment manufacturer's connection requirements. Report any infractions of installation procedure in written form.
- E. The fit of all equipment as it joins all walls, floors, and corners shall be tight (within 1/4") to adjacent walls, seal all equipment with NSF approved clear sealing compound and/or s.s. trim

molding of proper size with concealed fasteners. Inspect the site and advise in writing and/or on shop drawings all necessary building requirements door sizes, etc. to receive the equipment and assure accuracy of fit and installation.

- F. All cabinet bases and pieces of equipment which are to be set on bases or machine platforms shall be set into a sealing compound of color to match the tile mortar. Enclosures, backsplashes, and turn-backs to wall shall be pressed into a ribbon of the same material with the excess wiped out to a radius fillet. Where necessary, and to eliminate shifting and the subsequent breaking of this seal, item shall be anchored to floor and wall with suitable masonry anchors. All equipment with utility connections (island style sinks, dish tables, etc.) shall also be anchored to floor with s.s. flange type feet.
- G. All equipment and materials shall be new, of prime quality, full gauge thickness of compositions indicated by names or abbreviations stated in itemized specifications.
- H. Equipment batteries of one manufacturer are to be pre-fitted at the factory and provide photographic proof of such work.
- I. If equipment is noted as relocated or removed during the construction period, said equipment shall be disconnected and be re-connected as directed in the Construction Manager scope of work and removed and stored unless noted in the item specifications. Coordinate and supervise this work and label equipment for reuse. Reinstall and clean equipment as per the plans and specifications. Existing equipment not scheduled for reuse shall be removed as directed in the Construction Manager scope of work.

3.02 LIMIT OF OTHER SUBCONTRACTORS/TRADES RESPONSIBILITY:

A. Plumbing:

- 1. Provide rough-ins and piping with stop valves, elbows, nipples, couplers, traps, waste vents, gas regulators, for water, steam, gas, etc. and make final connections to the equipment as directed in the Construction Manager scope of work.
- 2. Install equipment accessories (faucets, lever wastes, solenoids, valves, gas hoses, nipples, etc.) as directed in the Construction Manager scope of work.
- 3. Provide water heater and janitors sink unless otherwise indicated on the plans as directed in the Construction Manager scope of work.
- 4. Disconnect and reconnect relocated equipment if applicable as directed in the Construction Manager scope of work.

B. Electrical:

- 1. Provide rough-ins, controls, panels, switches, wall receptacles to match equipment cords and plugs, starters, junction boxes, canopy light and fan switches, conduit, wiring, wall outlets, disconnects, etc. and make final connections to the equipment as directed in the Construction Manager scope of work.
- 2. Install equipment accessories (cords, wiring harness, switches, etc.) in conduit as required by code as directed in the Construction Manager scope of work.
- 3. Disconnect and reconnect relocated equipment as directed in the Construction Manager scope of work.

C. General:

1. All concrete platforms, bases, etc. will be provided as directed in the Construction Manager scope of work. Grouting of drip pans and/or floor troughs to be installed as directed in the Construction Manager scope of work.
2. All required holes and recesses for piping and ducts will be coordinated with all trades and as directed in the Construction Manager scope of work. Provide location, size, etc. This information is to be provided in adequate time to be incorporated in the work.
3. Unless stated in the item specifications, provide all floor recesses, insulated sub floors, tile floors and vapor barriers for walk-ins as noted in the plans and as directed in the Construction Manager scope of work.
4. If applicable, remove relocated equipment from kitchen and store in adjacent area during Kitchen construction period. Coordinate removal, inspection, storage, labeling, etc. of equipment. Reinstall relocated equipment as per plan after construction is completed as directed in the Construction Manager scope of work.
5. Provide fire rated walls in kitchen for cooking equipment exhaust hoods and non-combustible materials within 18" of top of hood or as required by fire codes as directed in the Construction Manager scope of work.

3.03 TESTING:

- A. After installation and hook, inspect, start up, clean, adjust and test all equipment under operating conditions for 48 hours prior to acceptance by Owner. If inspection or test shows defects, such defects shall be corrected and inspection and test repeated. Certify in writing that all equipment is performing in full compliance with the plans and specifications.

3.04 DEMONSTRATION:

- A. After utility connections to the equipment is completed, schedule and conduct the inspection and start up and final test of equipment prior to final inspection. Schedule the demonstration with the Owner and perform the demonstration in the presence of the Owner and/or their authorized representative with a minimum of seven days notification to owner.
- B. Before final inspection, remove any and all protective covering from his work and give all parts of all equipment a thorough cleaning and servicing, leaving items free from defects and remove trash from premises.
- C. Provide required competent personnel for two eight-hour periods as instructors to operating and maintenance personnel on the safe and proper operation and maintenance of all equipment. Provide additional instructions up to eight additional hours during the one-year guarantee period as requested by the Owner.
- D. Present all maintenance manuals and as built drawings as previously specified or requested by Consultant.

3.05 FINAL INSPECTION AND PUNCH LIST:

- A. After installation is completed and tested, notify the Consultant who will review all equipment and submit a repair or punch list of all items that are not in compliance with the documents. All items shall be completed immediately and not to exceed 14 days unless written notice is submitted and approved.

3.06 SCHEDULE OF EQUIPMENT:

- A. The following specifications refer to items of food service equipment on the drawings which shall form a part of these specifications and are binding as written herein, and will indicate the required quantity, size, etc. of each item.

Item Specifications:

Item #101 – Walk-in Cooler & Freezer - Qty. of 1

Base Manufacturer: Kolpak Co.

Base Model: R-Series

Alternate Manufacturer: Leer Co.

Alternate Manufacturer: Bally Co.

Alternate Manufacturer: American Panel Co.

Alternate Manufacturer: Imperial/Brown Co.

Alternate Manufacturer: Tafco Co.

Minimum specifications:

1. NSF walk-in sized approximately 7'-9" by 22'-1.5" and shape as shown on plan by 8'-6" high with aluminum interior and stainless steel exposed exterior finish, aluminum interior ceilings, door heaters, gaskets, pressure relief port, etc. for all compartments. Provide digital thermometer with audio / visual alarm system with dry contactors to connect to building management system, door heaters, gaskets, door threshold, pressure relief port, etc. for all compartments.
2. Pre-fabricated floor shall be .080 textured aluminum with .75" exterior grade plywood backing throughout and interior ramps. Floor panels shall be 4" thick foamed-in-place rigid polyurethane with an R-Value minimum of 32 and shall utilize cam-locks for assembly. Metal floor surface and plywood underlayment shall be foamed-in-place (not over-laid).
3. Provide standard 34" wide flush mount doors with stainless steel front, 24" high aluminum tread-plate interior kick-plate, two cam lift hinges, chrome plated hardware, self-closing hinged vinyl door curtain, and have same 4" thick foamed in place UL-25 flame spread rated urethane insulation as walls and ceiling.
4. Furnish one LED light mounted over the door and extra 48" LED lights inter-wired to switch per plan. All lighting shall have a 40 lumens per watt efficacy or more including ballast loss.
5. Joints between walk-in and building walls and ceiling shall be closed with filler strips of same appearance as exterior of box with service access panels as required.
6. Provide one UL listed 208 Volt 3 Phase system for the cooler and one 208 Volt 3 Phase system for the freezer. Provide Copeland compressors piped to BTU matched Bohn low profile end mount coils. Freezer shall have 208 Volt 1 Phase timed electric defrost coil. Cooler shall have 120 Volt air defrost coil. Both coils shall be furnished with electronically commutated motors, remote mounted (shipped loose) weather proof time clock for timed defrost, thermostat, solenoid, "P"-trap and expansion valves mounted and wired.
7. The air-cooled compressors shall be factory assembled and mounted on heavy duty steel base and be placed on roof with outdoor package in aluminum housing with hinged shroud, head pressure control with flood back, crankcase heater, sight glass, frame mounted dual pressure control, oversize condenser, drier, suction line filter, suction vibration eliminator, oversize receiver with total pump down capacity and king and queen service valves. Provide a pre-wired NEMA-3 control panel with industrial grade fused disconnect, terminal block, magnetic starters, circuit breakers and contactors, defrost timer and pump down switch.
8. Provide approximately 30'-0" of field piped and pressure tested insulated refrigeration lines per compartment to connect compressors to coils. Provide refrigeration with piping, controls, drain lines and heat tape, etc.
9. Provide a 5 Year warranty on compressors and 1 Year free service plan as per G.S.
10. Final connections, structural support, etc. are by Trades.

Item #102 – Utility Cart – Qty. of 2

Base Manufacturer: Cambro Co.

Base Model: BC2304S110

Alternate Manufacturer: None

Minimum specifications:

1. Unit shall be constructed of single molded, double-wall, high density polyethylene and thick injected polyurethane.
2. Heavy duty swivel casters.

Item #102A – Utility Cart – Qty. of 2

Base Manufacturer: Cambro Co.

Base Model: BC2354S110

Alternate Manufacturer: None

Minimum specifications:

1. Unit shall be constructed of single molded, double-wall, high density polyethylene and thick injected polyurethane.
2. Heavy duty swivel casters.

Item #103 - Shelving - Qty. of 18

Base Manufacturer: Inter-Metro Co.

Base Model: MQ24-G

Alternate Manufacturer: None

Minimum specifications:

1. Provide Metro-Max polymer units size and shape as per plan with four posts and shelves per section.
2. Units shall have 74" posts.
3. Post connectors, traverses and four vented shelf plates.
4. Two swivel and two locking casters.

Item #104 – Milk Crate Dolly – Qty. of 6

Base Manufacturer: Cambro Co.

Base Model: CD1313

Alternate Manufacturer: None

Minimum specifications:

1. Unit shall be constructed of single molded, double-wall, high density polyethylene and thick injected polyurethane.
2. Heavy duty swivel casters.

Item #105 - Pan Rack - Qty. of 4

Base Manufacturer: Crescor Co.

Base Model: 207-1811-C

Alternate Manufacturer: None

Minimum specifications:

1. Provide fully welded universal angle 64" high aluminum rack.
2. Two 5" heavy duty swivel casters and two 5" heavy duty locking swivel casters.

Item #106 - Dunnage Rack - Qty. of 6

Base Manufacturer: Inter-metro Co.

Base Model: HP-PD

Alternate Manufacturer: Eagle Co.

Minimum specifications:

1. Furnish and install polymer unit size and shape as per plan.
2. Connector strips.

Item #107 – Fire Protection System - Owner's existing equipment to remain in place throughout construction.

Item #108 – Portable Table - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJRN30-SE

Alternate Manufacturer: Approved Manufacturer as listed in Section 2.03 of the General Specifications.

Minimum specifications:

1. Furnish and install 14 Gauge 304 stainless steel table as per G.S. size and shape as per plan by 34" high.
2. Stainless steel legs and gussets.
3. Flat sound deadened top.
4. One 20" by 20" by 5" deep roller bearing drawer assembly with plastic or stainless-steel insert.
5. 16 Gauge stainless steel under shelf.
6. 5" heavy duty locking casters.

Item #108A – Portable Table - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJРАН30-SE

Alternate Manufacturer: Approved Manufacturer as listed in Section 2.03 of the General Specifications.

Minimum specifications:

1. Furnish and install 14 Gauge 304 stainless steel table as per G.S. size and shape as per plan by 34" high.
2. Stainless steel legs and gussets.
3. Flat sound deadened top.
4. One 20" by 20" by 5" deep roller bearing drawer assembly with plastic or stainless-steel insert.
5. 16 Gauge stainless steel under shelf.
6. 5" heavy duty locking casters.

Item #108B – Portable Table - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJРАН30-SE

Alternate Manufacturer: Approved Manufacturer as listed in Section 2.03 of the General Specifications.

Minimum specifications:

1. Furnish and install 14 Gauge 304 stainless steel table as per G.S. size and shape as per plan by 34" high.
2. Stainless steel legs and gussets.
3. Flat sound deadened top.
4. Two 20" by 20" by 5" deep roller bearing drawer assemblies with plastic or stainless-steel insert.
5. 16 Gauge stainless steel under shelf.
6. 5" heavy duty locking casters.

Item #109 – Mop Sink - Owner's existing equipment to remain in place throughout construction.

Item #110 – Lockers – Not in kitchen equipment contract.

Item #201 – Trash Bin – By Owner

Item #202 – Work Table - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJРАН30-SE-BS

Alternate Manufacturer: Approved Manufacturer as listed in Section 2.03 of the General Specifications

Minimum specifications:

1. Provide 14 Gauge 304 stainless steel table size and shape as per plan by 34" high.
2. Stainless steel legs, gussets, and adjustable bullet feet.
3. Sound deadened stainless steel top with 6" backsplash.
4. 16 Gauge stainless steel under shelf.
4. Two 20" by 20" by 5" deep roller bearing drawer assemblies with plastic or stainless-steel insert.
6. 10" deep stainless steel over shelf mounted 24" above table surface as show on plan.

Item #203 – Hot Food Cabinet - Qty. of 2

Base Manufacturer: Cres-Cor Co.

Base Model: H-137-SUA-12D

Alternate Manufacturer: None

Minimum specifications:

1. Provide stainless steel insulated cabinet that operates on 120 Volt with cord and plug.
2. Universal angles sized for 12" by 20" and 18" by 26" pans.
3. 5" heavy duty locking casters.
4. Perimeter bumpers.
5. Field reversible Dutch doors.
6. Top mounted controls.
7. Transport latch and wire transport angles.

Item #204 – Cold Food Cabinet - Qty. of 2

Base Manufacturer: Cres-Cor Co.

Base Model: R-171-SUA-10SD

Alternate Manufacturer: None

Minimum specifications:

1. Provide stainless steel insulated cabinet that operates on 120 Volt with cord and plug.
2. Universal angles sized for 12" by 20" and 18" by 26" pans.
3. 5" heavy duty locking casters.
4. Perimeter bumpers.
5. Left hinged door.
6. Top mounted controls and bottom mount compressor.
7. Transport latch and wire transport angles.
8. Provide a 5 Year warranty on compressor with and 1 Year free service plan as per G.S.

Item #205 – Can Opener – Qty. of 1

Base Manufacturer: Edlund Co.

Base Model: S-11CL

Alternate Manufacturer: Nemco Co.

Minimum specifications:

1. Stainless steel construction.
2. Clamp base.

Item #301 – Hood & Ventilation System - Owner's existing equipment to remain in place throughout construction.

Item #302 - Convection Oven - Qty. of 2

Base Manufacturer: Blodgett Co.

Base Model: ZEPHAIRE-100-G

Alternate Manufacturer: None

Minimum specifications:

1. Double deck standard depth.
2. Gas fired unit that operates on 120 Volt with cords and plugs.
3. Stainless steel front and sides.
4. Door windows.
5. Flue deflector.
6. 5" heavy duty locking casters.
7. Two speed motors with solid state control panel with standard controls.
8. Two Dormont Co. or T&S Co. 1675-KIT-S-PS swivel gas hose with quick disconnect, gas valve, posi-sets and restraint line.

Item #401 – Hot Food Table – Qty. of 2

Base Manufacturer: Duke Co.

Base Model: TEHF-60SS

Alternate Manufacturer: Randell Co.
Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Provide 34" high unit size and shape per plan that operates on 120 Volt with cord and plug.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. Wet or dry hot food wells with drains, drain manifold with individual and master valves. Drain valves to be easily accessible from the employee side of the counter.
4. Open rear with plastic laminate front and end panels in color as selected by the Architect.
5. One 12" solid folding inverted "V" style stainless steel tray slide and one 8" stainless steel solid folding work shelf mounted on rear.
6. Set of 5" heavy duty locking casters.
7. Furnish and install BSI Co. or Premier Brass Co. Model #ZG9930 sneeze guard with brushed aluminum uprights and top mounted hardware, slim/stealth heat lamp, light, glass top, ends, and adjustable front. Unit shall meet current NSF standards. Center posts not acceptable.
8. Sneeze guard assembly and hot food table to be inter-wired to a common point to provide one electrical connection for entire unit and be supplied with a cord and plug.

Item #402 - Air Curtain Refrigerator - Qty. of 1

Base Manufacturer: True Co.

Base Model: TCGG-36-S-LD

Alternate Manufacturer: None

Minimum specifications:

1. 48" high unit shall operate on 120 Volt with cord and plug.
2. Plastic laminate exterior in color as selected by the Architect.
3. Top mounted shielded lighting, shelf lighting.
4. Black base, black trim, stainless steel display deck, black interior back panel, and mirrored stainless steel ends.
5. Pull down energy saving night shade and lockable roll down security curtain.
6. Digital thermometer.
7. Two shelves mounted on adjustable pilaster.
8. Rear access doors.
9. 6" Rear side panel extensions.
10. Electronic temperature sensors.
11. Heavy duty locking casters.
12. Self-contained refrigeration system with condensate evaporator, and on/off switch.
13. Provide a 5 Year warranty on compressor with and 1 Year free service plan as per G.S.

Item #403 – Cold Food Table – Qty. of 2

Base Manufacturer: Duke Co.

Base Model: TCM-60SS-N7

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Provide 34" high unit as per plan with NSF-7 drop-in self-contained refrigerated cold pan with drain and shut off valve, on/off switch, and pan adapter bars. Unit shall operate on 120 Volt with cord and plug. Drain shut off valve to be easily accessible from the employee side of the counter.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. Plastic laminate front and end panels in color as selected by the Architect.
4. Two 12" solid folding inverted "V" style stainless steel tray slides.
5. Set of 5" heavy duty locking casters.
6. Furnish and install BSI Co. or Premier Brass Co. Model #ZG9930-2 sneeze guard with brushed aluminum uprights and top mounted hardware, light, glass top, ends, and adjustable front. Unit shall meet current NSF standards. Center posts not acceptable.
7. Sneeze guard assembly and cold food table to be inter-wired to a common point to provide one electrical connection for entire unit and be supplied with a cord and plug.

Item #404 – Spare Number

Item #405 - Milk Cooler - Qty. of 2

Base Manufacturer: Beverage Air Co.

Base Model: SMF49-1-S

Alternate Manufacturer: None

Minimum specifications:

1. Self-contained forced air unit that operates on 120 Volt with cord and plug.
2. Dial thermometer.
3. Lid locking device.
4. Stainless steel exterior.
5. Heavy duty locking casters.

Item #406 – Cashier Counter – Qty. of 1

Base Manufacturer: Duke Co.

Base Model: TCS-30SS

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Counter to be 34" high, size and shape as per plan. This counter can be constructed as a single counter or two separate smaller counters mounted side by side.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. Plastic laminate front and end panels in color as selected by the Architect.
4. Two 12" solid folding inverted "V" style stainless steel tray slides.
5. Provide enclosed base with open end, one locking cash drawer and stainless-steel interior under shelf.
6. 5" heavy duty locking casters.

Item #407 – Cash Registers / POS – By Owner.

Item #501 – Spare Number

Item #502 - Hand Sink - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: HSA-10-FA-P

Alternate Manufacturer: Advance Tabco Co.

Minimum specifications:

1. 9.75" by 13.5" by 6.75" deep stainless-steel sink with fully welded side splashes.
2. Standard faucet and single foot pedal and faucet assembly.
3. Soap and towel dispenser shall be provided and installed by the Owner.

Item #503 - Pot Sink - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJ-RAN2660-3-18

Alternate Manufacturer: Advance Tabco Co.

Minimum specifications:

1. 14 Gauge 304 unit constructed per G.S. size and shape as per plan by 34" high.
2. 9" backsplash, 21" by 26.5" by 14" deep sinks.
3. Integral drain boards and integrally welded disposer cone.
4. One T&S Co. 5F-8WLS12 faucet, and one 5PR-8W12-C + B-Tee-RGD spray hose unit and faucet.
5. T&S Co. B-3990-01-3X modular waste drains with connected overflows.
6. Stainless steel legs, gussets, and adjustable bullet feet.
7. Area below tables is to be furnished with 16 Gauge removable stainless steel under shelving where possible.

8. Provide 14" coated wire wall shelves and brackets mounted 24" above sink as shown on plans.

Item #504 - Disposer - Qty. of 1

Base Manufacturer: Salvajor Co.

Base Model: 200-CA-18-MRSS-LD

Alternate Manufacturer: None

Minimum specifications:

1. 18" stainless steel cone assembly with silver saver.
2. Solenoid valve.
3. Flow control.
4. T&S Co. B-0455 vacuum breaker assembly.
5. Unit shall operate on 208 Volt 3 Phase 2 HP.
6. Provide a MRSS-LD series NEMA-4X stainless steel control panel with 24 Volt circuitry, run light, interlocked disconnect, manual reversing switch, start-stop buttons and magnetic contactors.
7. Provide T&S Co. 5PR-8W12-C + B-TEE-RGD spray hose unit with rear connector kit.

END OF SECTION 11 4000 – FOOD SERVICE EQUIPMENT

Garrett Morgan Main Kitchen

Food Service Equipment Purchase and Install Drawings

ARCHITECT:

PROJECT:
CMSD GARRETT MORGAN
MAIN KITCHEN
4016 WOODBINE
CLEVELAND, OHIO 44113

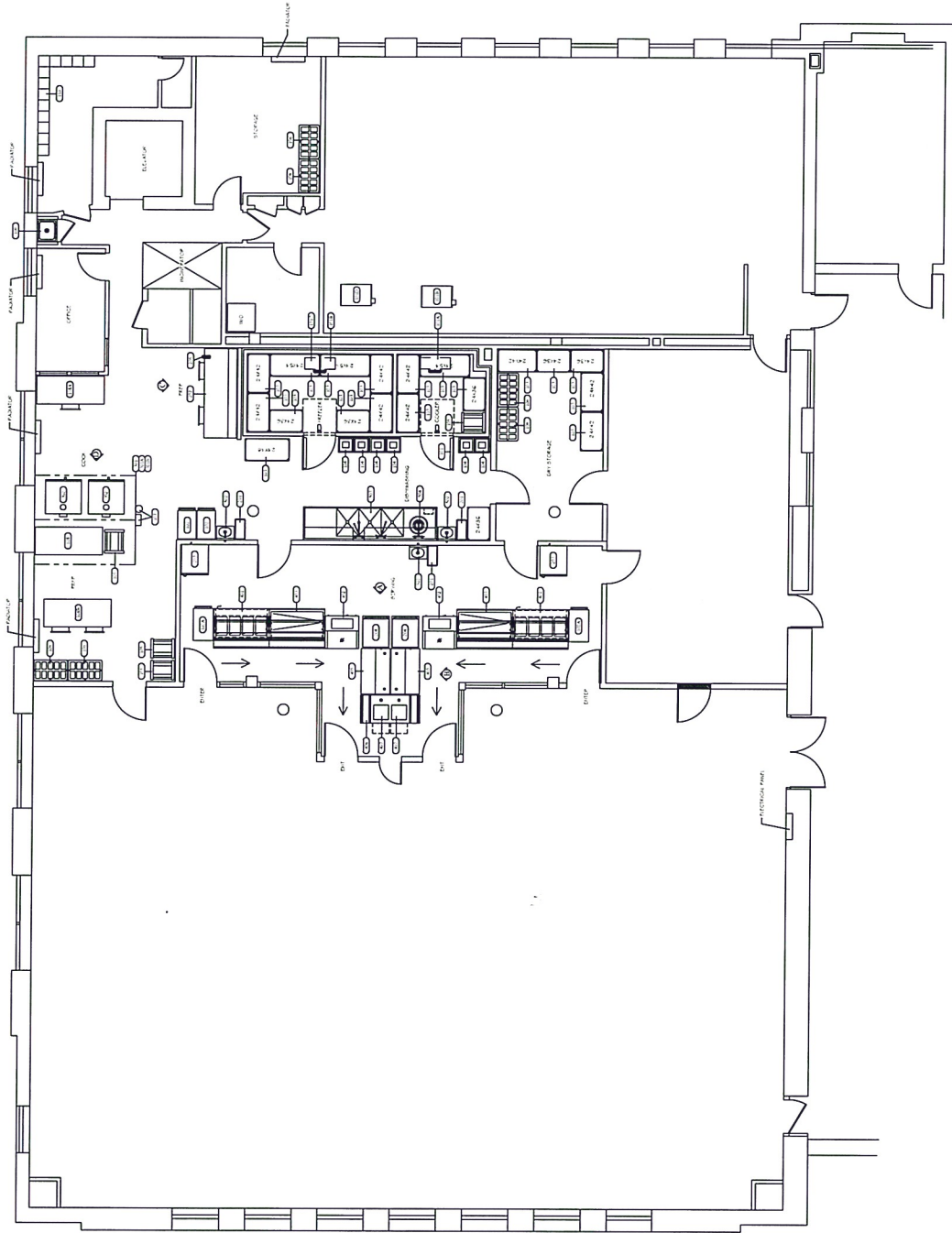
SHEET TITLE:
FOOD SERVICE
EQUIPMENT
FLOOR PLAN
SCALE 1/4" = 1'-0"

REV	DATE	BY	PROJECT
1	12/20/01	W. J. RAY	FOOD SERVICE
2	12/20/01	W. J. RAY	EQUIPMENT
3	12/20/01	W. J. RAY	FLOOR PLAN
4	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
5	12/20/01	W. J. RAY	BY
6	12/20/01	W. J. RAY	PROJECT
7	12/20/01	W. J. RAY	FOOD SERVICE
8	12/20/01	W. J. RAY	EQUIPMENT
9	12/20/01	W. J. RAY	FLOOR PLAN
10	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
11	12/20/01	W. J. RAY	BY
12	12/20/01	W. J. RAY	PROJECT
13	12/20/01	W. J. RAY	FOOD SERVICE
14	12/20/01	W. J. RAY	EQUIPMENT
15	12/20/01	W. J. RAY	FLOOR PLAN
16	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
17	12/20/01	W. J. RAY	BY
18	12/20/01	W. J. RAY	PROJECT
19	12/20/01	W. J. RAY	FOOD SERVICE
20	12/20/01	W. J. RAY	EQUIPMENT
21	12/20/01	W. J. RAY	FLOOR PLAN
22	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
23	12/20/01	W. J. RAY	BY
24	12/20/01	W. J. RAY	PROJECT
25	12/20/01	W. J. RAY	FOOD SERVICE
26	12/20/01	W. J. RAY	EQUIPMENT
27	12/20/01	W. J. RAY	FLOOR PLAN
28	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
29	12/20/01	W. J. RAY	BY
30	12/20/01	W. J. RAY	PROJECT
31	12/20/01	W. J. RAY	FOOD SERVICE
32	12/20/01	W. J. RAY	EQUIPMENT
33	12/20/01	W. J. RAY	FLOOR PLAN
34	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
35	12/20/01	W. J. RAY	BY
36	12/20/01	W. J. RAY	PROJECT
37	12/20/01	W. J. RAY	FOOD SERVICE
38	12/20/01	W. J. RAY	EQUIPMENT
39	12/20/01	W. J. RAY	FLOOR PLAN
40	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
41	12/20/01	W. J. RAY	BY
42	12/20/01	W. J. RAY	PROJECT
43	12/20/01	W. J. RAY	FOOD SERVICE
44	12/20/01	W. J. RAY	EQUIPMENT
45	12/20/01	W. J. RAY	FLOOR PLAN
46	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
47	12/20/01	W. J. RAY	BY
48	12/20/01	W. J. RAY	PROJECT
49	12/20/01	W. J. RAY	FOOD SERVICE
50	12/20/01	W. J. RAY	EQUIPMENT
51	12/20/01	W. J. RAY	FLOOR PLAN
52	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
53	12/20/01	W. J. RAY	BY
54	12/20/01	W. J. RAY	PROJECT
55	12/20/01	W. J. RAY	FOOD SERVICE
56	12/20/01	W. J. RAY	EQUIPMENT
57	12/20/01	W. J. RAY	FLOOR PLAN
58	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
59	12/20/01	W. J. RAY	BY
60	12/20/01	W. J. RAY	PROJECT
61	12/20/01	W. J. RAY	FOOD SERVICE
62	12/20/01	W. J. RAY	EQUIPMENT
63	12/20/01	W. J. RAY	FLOOR PLAN
64	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
65	12/20/01	W. J. RAY	BY
66	12/20/01	W. J. RAY	PROJECT
67	12/20/01	W. J. RAY	FOOD SERVICE
68	12/20/01	W. J. RAY	EQUIPMENT
69	12/20/01	W. J. RAY	FLOOR PLAN
70	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
71	12/20/01	W. J. RAY	BY
72	12/20/01	W. J. RAY	PROJECT
73	12/20/01	W. J. RAY	FOOD SERVICE
74	12/20/01	W. J. RAY	EQUIPMENT
75	12/20/01	W. J. RAY	FLOOR PLAN
76	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
77	12/20/01	W. J. RAY	BY
78	12/20/01	W. J. RAY	PROJECT
79	12/20/01	W. J. RAY	FOOD SERVICE
80	12/20/01	W. J. RAY	EQUIPMENT
81	12/20/01	W. J. RAY	FLOOR PLAN
82	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
83	12/20/01	W. J. RAY	BY
84	12/20/01	W. J. RAY	PROJECT
85	12/20/01	W. J. RAY	FOOD SERVICE
86	12/20/01	W. J. RAY	EQUIPMENT
87	12/20/01	W. J. RAY	FLOOR PLAN
88	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
89	12/20/01	W. J. RAY	BY
90	12/20/01	W. J. RAY	PROJECT
91	12/20/01	W. J. RAY	FOOD SERVICE
92	12/20/01	W. J. RAY	EQUIPMENT
93	12/20/01	W. J. RAY	FLOOR PLAN
94	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"
95	12/20/01	W. J. RAY	BY
96	12/20/01	W. J. RAY	PROJECT
97	12/20/01	W. J. RAY	FOOD SERVICE
98	12/20/01	W. J. RAY	EQUIPMENT
99	12/20/01	W. J. RAY	FLOOR PLAN
100	12/20/01	W. J. RAY	SCALE 1/4" = 1'-0"

CONSTRUCTION OF THIS SHEET IS THE RESPONSIBILITY OF THE ARCHITECT. THE ARCHITECT SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THE ARCHITECT BY THE CLIENT. THE ARCHITECT SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THE ARCHITECT BY THE CLIENT.

SHEET NUMBER:

FSE-1

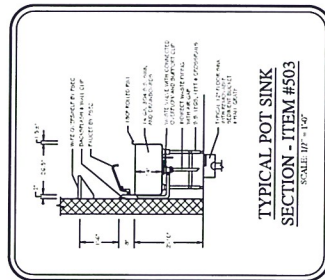
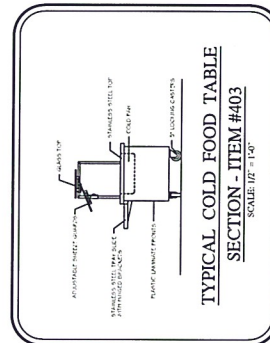
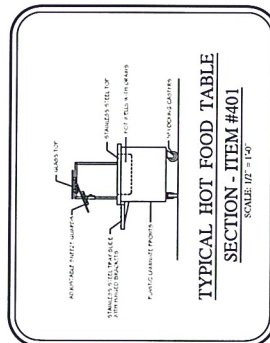
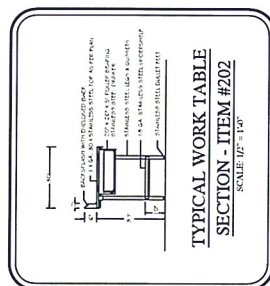
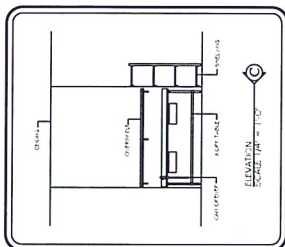
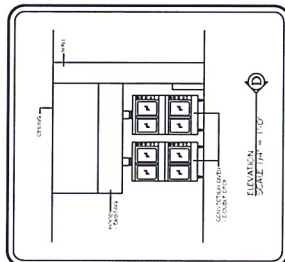
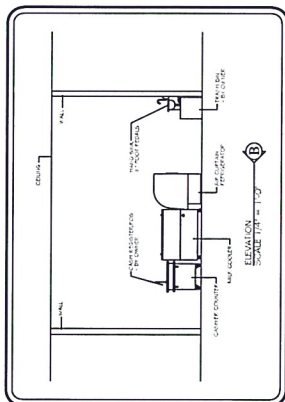
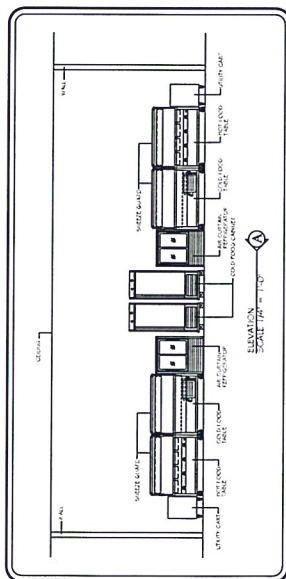


- NOTE:
1. THE CLIENT SHALL VERIFY ALL EQUIPMENT REQUIREMENTS FOR THE KITCHEN AND CONFIRM THE REQUIREMENTS WITH THE ARCHITECT.
 2. THE CLIENT SHALL VERIFY THE REQUIREMENTS FOR THE KITCHEN AND CONFIRM THE REQUIREMENTS WITH THE ARCHITECT.
 3. THE CLIENT SHALL VERIFY THE REQUIREMENTS FOR THE KITCHEN AND CONFIRM THE REQUIREMENTS WITH THE ARCHITECT.
 4. THE CLIENT SHALL VERIFY THE REQUIREMENTS FOR THE KITCHEN AND CONFIRM THE REQUIREMENTS WITH THE ARCHITECT.
 5. THE CLIENT SHALL VERIFY THE REQUIREMENTS FOR THE KITCHEN AND CONFIRM THE REQUIREMENTS WITH THE ARCHITECT.

DATE CODE	PROJECT PHASE	BY
01/06/77 GAEHRK25	CONSTRUCTION DOCUMENTS	CM
01/06/77 GAEHRK35	BIDS	CM

EQUIPMENT SCHEDULE														
Item	QTY	DESCRIPTION	CW (in)	HW (in)	MANUFACTURER	MANUFACTURE DATE	MONTH	YEAR	MA (in)	MA (in)	Volts	Ph.	Amperes	Equipment Remarks
001	1	WALK-IN COOLER FREEZER							100	1	0140	1	3.0	INITIATED 11/06/08, RE-STARTED 11/01/09
002	1	FREEZER			PHD				100	1	0140	1	3.0	
003	1	COOLER			PHD				100	1	0140	1	3.0	RE-COOLING BY 11/01/09
004	1	FREEZER CASE			PHD				100	1	0140	1	3.0	RE-COOLING BY 11/01/09
005	1	FREEZER COMPRESSOR			PHD				100	1	0140	1	3.0	RE-COOLING BY 11/01/09
006	1	FREEZER COMPRESSOR			PHD				100	1	0140	1	3.0	RE-COOLING BY 11/01/09
007	1	FREEZER COMPRESSOR			PHD				100	1	0140	1	3.0	RE-COOLING BY 11/01/09
008	1	FREEZER COMPRESSOR			PHD				100	1	0140	1	3.0	RE-COOLING BY 11/01/09
009	1	FREEZER COMPRESSOR			PHD				100	1	0140	1	3.0	RE-COOLING BY 11/01/09
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011	1	FREEZER COMPRESSOR			PHD				100	1	0140	1	3.0	RE-COOLING BY 11/01/09
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110	1	FREEZER COMPRESSOR			PHD				10					

— DENOTES OWNERS EXISTING EQUIPMENT TO BE MAINT.



ARCHITECT:

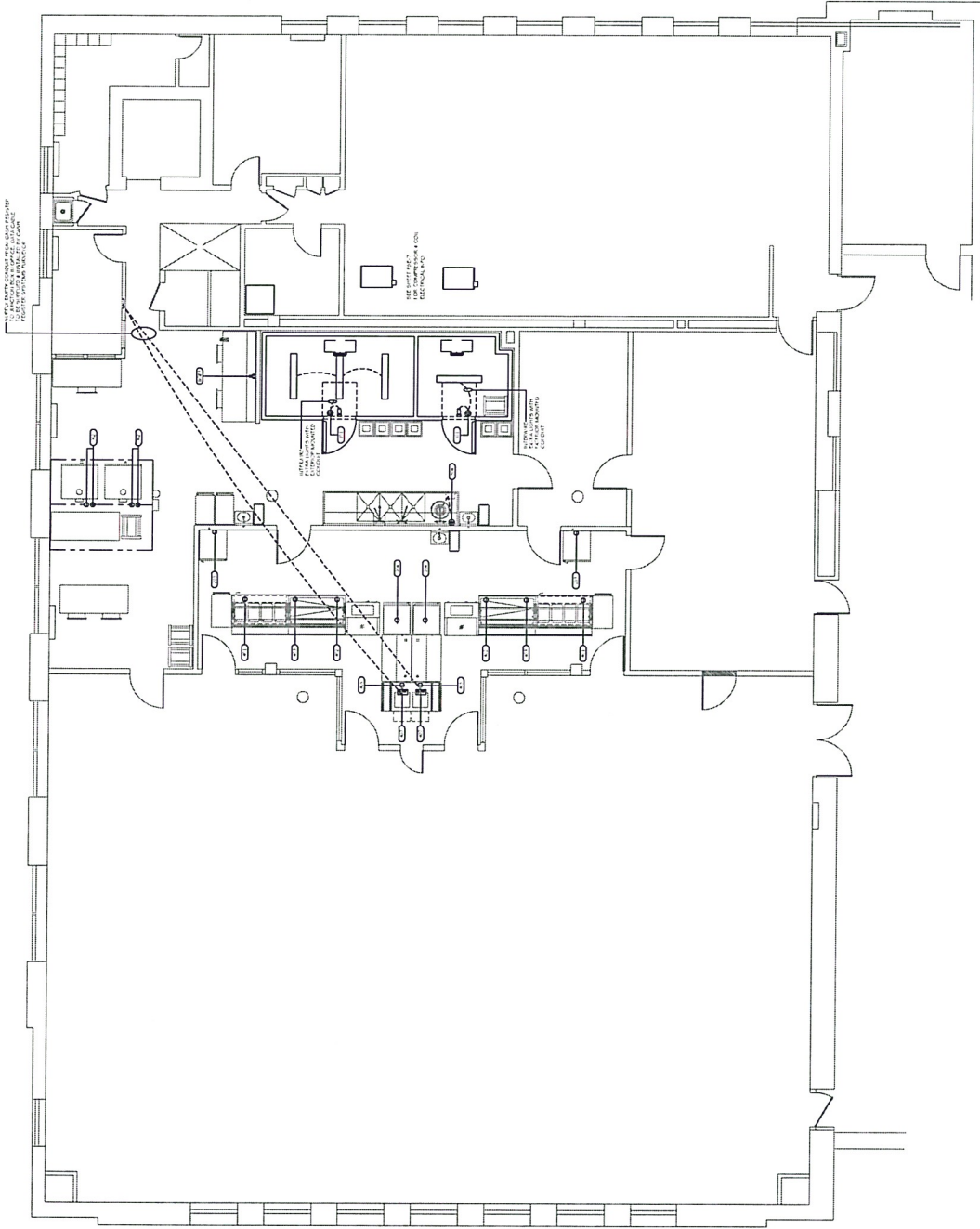
PROJECT:
CMSD GARRETT MORGAN
MAIN KITCHEN
4016 WOODBINE
CLEVELAND, OHIO 44113

SHEET TITLE:
FOOD SERVICE
ELECTRICAL
FLOOR PLAN
SCALE 1/4" = 1'-0"

NO.	DATE	BY	PROJECT	DESCRIPTION
1	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE
2	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE
3	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE
4	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE
5	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE
6	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE
7	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE
8	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE
9	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE
10	01/10/11	JRA	FOOD SERVICE	FOOD SERVICE

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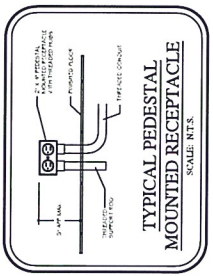
SHEET NUMBER
FSE-3



- NOTE:
1. FSC SHALL VERIFY EQUIPMENT REQUIREMENTS FOR ALL EQUIPMENT TO BE INSTALLED AND SHALL PROVIDE A SCHEDULE OF EQUIPMENT, OWNER, SUPPLIER, EQUIPMENT, ETC.
 2. TRACES TO NUCE LISTING NUMBER.
 3. TRACES TO NUCE LISTING NUMBER, STORE & RECONNECT ANY EXISTING EQUIPMENT AS REQUIRED.
 4. EQUIPMENT AND TRACES TO BE DISCONNECTED BY OWNER AND RECONNECTED AS REQUIRED BY THE FSC AS DIRECTED BY OWNER.
 5. EQUIPMENT DESIGNATED AS RELIGATED SHALL BE DISCONNECTED BY THE TRACES AND RECONNECTED BY THE FSC AFTER TANK AND SPECIFICATIONS.

ARCHITECT:

EQUIPMENT SCHEDULE					
ITEM	EQUIPMENT DESCRIPTION	VOLTS	PH	AMPS DIRECT TO LINE	REMARKS
001	WALK-IN COOLER/STORAGE	120	1	10	WIRE TO BOTTOM LEFT DOOR HATCH
002	ICE STORAGE	120	1	10	
003	ICE STORAGE	120	1	10	
004	COFFEE/TEA CABINET	120	1	10	
005	CONNECT-TO-OPEN DOOR HATCH	120	1	10	
006	ICE STORAGE	120	1	10	
007	ICE STORAGE	120	1	10	
008	ICE STORAGE	120	1	10	
009	ICE STORAGE	120	1	10	
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TRADE & FSEC NOTES:

1. ALL EQUIPMENT SHALL BE INSTALLED AND OPERATED IN ACCORDANCE WITH THE FOLLOWING NOTES:
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21. ALL EQUIPMENT SHALL BE INSTALLED AND OPERATED IN ACCORDANCE WITH THE FOLLOWING NOTES:

PROJECT:
CMSD GARRETT MORGAN
MAIN KITCHEN
4016 WOODBINE
CLEVELAND, OHIO 44113

SHEET TITLE:
FOOD SERVICE
ELECTRICAL
SCHEDULE
SCALE 1/4" = 1'-0"

BY	DATE	REVISION
01	01/01/01	01
02	01/01/01	02
03	01/01/01	03
04	01/01/01	04
05	01/01/01	05
06	01/01/01	06
07	01/01/01	07
08	01/01/01	08
09	01/01/01	09
10	01/01/01	10

DESIGNED BY: JRA
CHECKED BY: JRA
DATE: 01/01/01
PROJECT: CMSD GARRETT MORGAN
SHEET NUMBER: FSE-4

NOTE:

1. ALL EQUIPMENT SHALL BE INSTALLED AND OPERATED IN ACCORDANCE WITH THE FOLLOWING NOTES:
2. ALL EQUIPMENT SHALL BE INSTALLED AND OPERATED IN ACCORDANCE WITH THE FOLLOWING NOTES:
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ARCHITECT:

PROJECT:
CMSD GARRETT MORGAN
MAIN KITCHEN
4016 WOODBINE
CLEVELAND, OHIO 44113

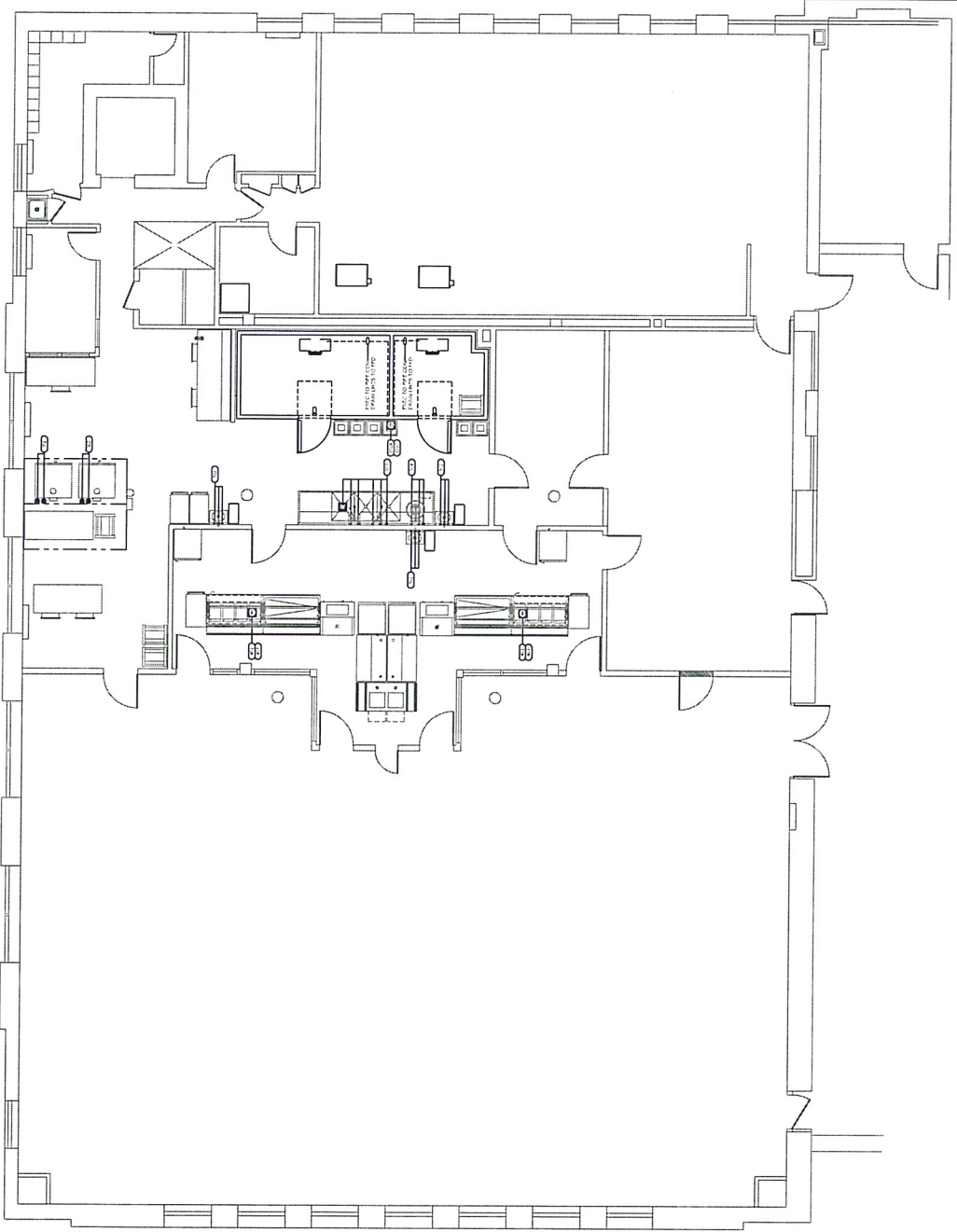
SHEET TITLE:
FOOD SERVICE
PLUMBING
FLOOR PLAN
SCALE 1/4" = 1'-0"

DATE	PROJECT	BY
10/1/2010	FOOD SERVICE	JRA
10/1/2010	PLUMBING	JRA
10/1/2010	FLOOR PLAN	JRA
10/1/2010	CMSD GARRETT MORGAN	JRA
10/1/2010	MAIN KITCHEN	JRA
10/1/2010	4016 WOODBINE	JRA
10/1/2010	CLEVELAND, OHIO 44113	JRA

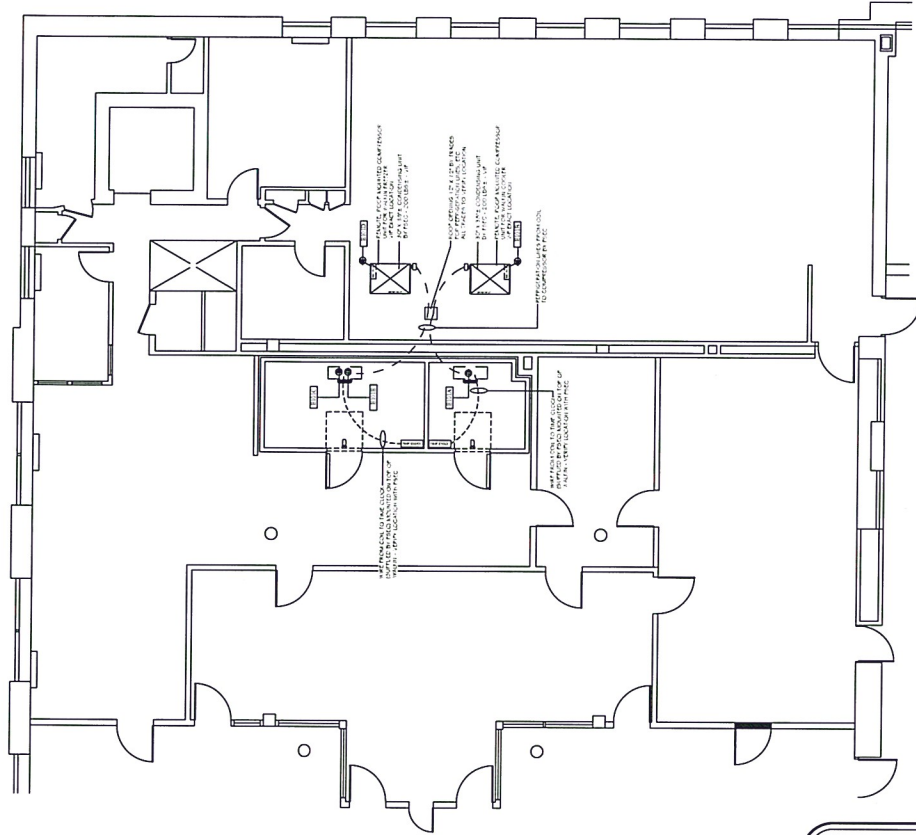
10000 WOODBINE AVE., SUITE 100
CLEVELAND, OHIO 44131
TEL: (216) 461-1111
FAX: (216) 461-1112
WWW.JRA-CONSULTANTS.COM

SHEET NUMBER

FSE-5



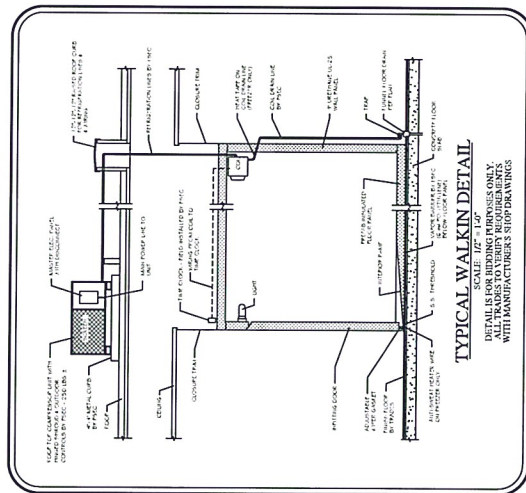
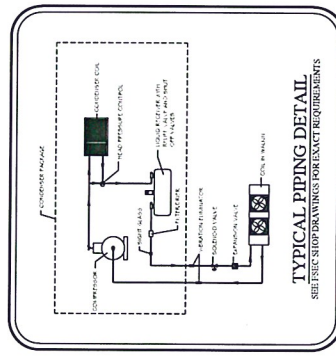
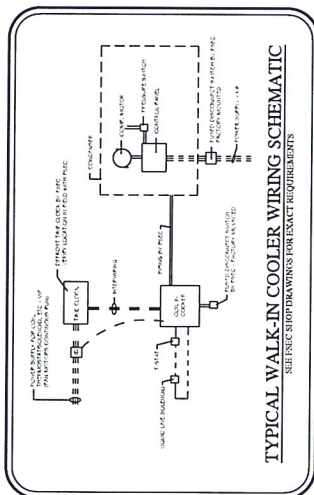
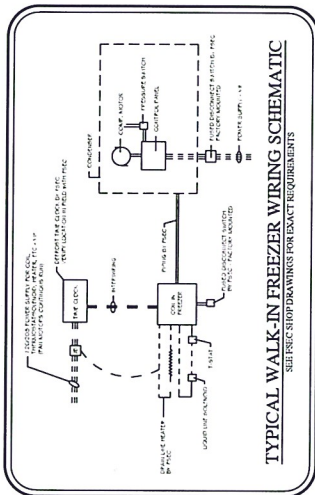
- NOTE:
1. FSC SHALL VERIFY EQUIPMENT REQUIREMENTS FOR:
 - a. EQUIPMENT TYPE, SIZE, AND LOCATION
 - b. EQUIPMENT CAPACITY, WEIGHT, AND DIMENSIONS
 - c. EQUIPMENT, GASES, SUPPLIED EQUIPMENT, ETC.
 2. TRUCKS TO BE USED FOR UNLOADING AND LOADING SHALL BE APPROVED BY THE FSC.
 3. TRUCKS TO BE USED FOR UNLOADING AND LOADING SHALL BE APPROVED BY THE FSC.
 4. ANY EQUIPMENT REQUIRED TO BE DISCONNECTED FOR CONSTRUCTION PURPOSES:
 - a. EQUIPMENT SHALL BE DISCONNECTED BY THE FSC
 - b. TRUCKS AND EQUIPMENT SHALL BE DISCONNECTED BY THE FSC
 - c. AS DIRECTED BY OWNER.
 5. EQUIPMENT DESIGNATED AS RELOCATED SHALL BE DISCONNECTED BY THE TRUCKS AND RELOCATED BY THE FSC AFTER PLUMBING AND SPECIFICATIONS.



ELECTRICAL CONNECTIONS SCHEDULE								
CONN.	VOLTS	PH	KW	HP	AMPS	CONNECTION	HEIGHT	REMARKS
MAIN	110				5.0	DISC-T	10A	WINDING FROM COZE TO TIME CLOCK
MAIN	220	1			11.0	DISC-T	10A	
ELRIC	200	1			11.0	DISC-T	10A	WINDING FROM COZE TO TIME CLOCK
ELRIC	200	1			11.0	DISC-T	ROOF	
ELRIC	200	1			5.0	DISC-T	10A	100% ZONE III AT TAFE

REFRIGERATION NOTES

1. **CONSTRUCTIVE INTEREST THEORY**
2. **THEORY OF THE FIRM**
3. **THEORY OF THE MARKET**
4. **THEORY OF THE INDUSTRY**
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100. **THEORY OF THE INDUSTRY**



NOTE:

1. FISC SHALL VERIFY REQUIREMENTS FOR TOWING VEHICLE SUPPLIED CARRIER RELOCATED BY TRAILER OR OTHER EQUIPMENT, ETC.
2. TRAILER TO BE USED IN ACCORDANCE WITH AVAILABLE
3. TRAILER SHALL DISCONNECT, REMOTE, STORE & RECONNECT ANY EXISTING EQUIPMENT AS REQUIRED FOR CONSTRUCTION PURPOSES.
4. EQUIPMENT NOT BEING REQUESTED TO BE DISCONNECTED BY TRAILER AND STOKED ON DISCONNECTED BY THE FISC AS DIRECTED BY OWNER.
5. EQUIPMENT DESIGNATED AS DISCONNECTED SHALL BE DISCONNECTED BY THE TRAILER AND RELOCATED BY THE FISC USING PILING AND SPECIFICATIONS

Garrett Morgan Trailer Kitchen

Food Service Equipment Purchase and Install Specifications

SECTION 11 4000 - FOOD SERVICE EQUIPMENT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. All Drawings, General and Supplementary Conditions, Division 1, Specifications, and related contract documents apply to this section and the requirements may exceed those shown in this section. The Food Service Engineering Consultants on this project are JRA Food Service Consultants, LLC in Grand Rapids, Michigan (616-454-4433) and is responsible to the Architect and Owner for ascertaining that the Food Service Equipment Contractor complies with all the requirements of this section.

1.02 SUMMARY

- A. As listed in this division, the Food Service Equipment Contractor shall furnish all labor, material, work, equipment, transportation, accessories, taxes, etc. for a complete and continuous installation in accordance with the requirements of these plans and specifications and related documents.
- B. The FSEC shall familiarize themselves with local conditions affecting the cost of the work and examine the site and all Food Service Equipment contract documents including Architectural drawings, and contract documents, all of which constitute the responsibility of the FSEC.

1.03 SUBSTITUTIONS AND VOLUNTARY ALTERNATES:

- A. The first manufacturer of equipment listed in the item specifications is intended to be the basis of the base bid. All other manufacturers must conform to the specifications, size, accessories, materials, capacity, etc.
- B. A proposed substitution on any specified equipment must be submitted to the Consultant 10 days in advance of the bid date and must include all manufacturers shop drawings and data sheets on the proposed equipment. The supplier shall pay any additional costs incurred for changes, engineering services, utilities, construction, etc. that may be incurred by said substitutions.

1.04 INTERPRETATION OF DOCUMENTS:

- A. Prior to receipt of bids, all questions, clarification, and changes in the documents shall be executed by addendum. After award of contract, all changes shall be performed by bulletin.
- B. FSEC shall submit an itemized price breakdown to the Consultant on their letterhead for each piece of equipment including labor, freight, manufacturer, quantity, taxes, etc. as applicable.
- C. Any deletions of equipment by the Owner and/or Consultant prior to approval and/or release of the shop drawings, brochures, etc. shall be credited to the Owner at the itemized price as listed in the itemized price breakdown and include all equipment costs, freight, labor, taxes etc. Pricing shall not be credited at the amount listed on the Schedule of Values.
- D. Any additions to equipment by the Owner and/or Consultant that result in cost increases after approval and/or release of shop drawings, brochures, etc. shall be immediately noted by the FSEC and a written request with prices for a bulletin shall be issued by the FSEC to the Consultant.
- E. The General Specifications are applicable to items listed in the item specifications.

1.05 ABBREVIATIONS

- A. The following abbreviations are used herein unless otherwise noted on the plans or item specifications.

A	Amps
AFF	Above Finish Floor
BTC	Branch To Connection
CFM	Cubic Feet of Air Per Minute
C.P.	Chrome Plated
CW	Cold Water - 25 PSI
DCO	Duplex Convenience Outlet - 20 amp
DFA	Drop From Above
E.C.	Electrical Trades
FL DR	Floor Drain - Wade W1104
FFD	Funnel Floor Drain - Wade 1104-EF4
FL SK	Floor Sink - 12" - Wade W9144-15
FPM	Feet Per Minute
FSEC	Food Service Equipment Contractor
F.S.C.	Food Service Consultant
G	Natural Gas - 7" water column
GP	General Purpose
G.S.	General Specifications
G.C.	General Trades
HVAC	Heating Ventilation HVAC Trades
HP	Horsepower
HW	Hot Water - 140 degree - 25 PSI
J.B.	Junction Box
KW	Kilowatt
N.S.R.	No Service Required
N.I.C.	Not in FSEC contract
P.C.	Plumbing Trades
S.O.M.	Standard of Manufacturer
s.s.	Stainless Steel
SS	Steam Supply - 25 PSI
SR	Steam Return
V	Volts
VIF	Verify in field
W	Waste Outlet
W.G.	Water Gauge - Static Pressure

1.06 CONFORMITY

- A. All equipment furnished under these specifications shall be newly manufactured and installed in strict conformity with all codes, regulations and requirements of the State Board of Health, the National Sanitation Foundation Standards, or any state or local agency.
- B. All equipment shall conform to the current standards and bear the seal of UL, NEMA, ASME, AGA, OSHA, NFPA, etc. where applicable and/or otherwise conform to the requirements of the authorities having jurisdiction.
- C. Wherever the requirements of the specifications and drawings are in excess of the regulations, the specifications and drawings shall govern. Whenever the regulations are in excess of the specifications and drawings, the regulations shall govern.
- D. Wherever the requirements of the specifications are in excess of the drawings, the specifications shall govern.
- E. Wherever the requirements of the drawings are in excess of the specifications, the drawings shall govern.

1.07 PERMITS - LICENSES - PHONE CALLS

- A. Provide to the proper authorities all notices required by law, obtain all refrigeration permits, licenses, etc., and pay any legal fees necessary for the due and faithful performance of the work, and which may arise incidental to the fulfilling of the foodservice documents. The Owner shall pay for any health department plan review or license fees.
- B. Permits shall be provided as required. Refer to the Construction Managers scope of work.
- C. Accept all collect phone calls relating to food service equipment that pertain to the project until warranty has expired on the equipment.

1.08 SUBMITTAL OF BUYOUT BROCHURES AND SHOP DRAWINGS

- A. Shop drawing and brochure requirements may also be listed in the general requirements or other areas of the documents. Provide submittals as per those requirements or as listed below - whichever is greater.
- B. All shop drawings, rough-in drawings, equipment brochures, etc. shall be submitted at one time within 20 days of the notice to proceed. Said items are subject to the terms and conditions of the plans and specifications for the entire project. All drawings which are submitted for distribution shall be clear and concise and have the following notes printed on each and every sheet:

Name of the F.S.E.C.
 Name and location of the project.
 Name of the Architect.
 Name of the Consultant.
 Name of the General Contractor.
 Drawing number.
 Date of drawing and revisions.

The following statement: The (name of F.S.E.C.) is solely responsible for the accuracy and completeness of these drawings and specifications, and we approve them for construction purposes. Signed: (Officer, Partner, etc.)

- C. All submitted data shall be reviewed for general compliance only and does not alleviate the F.S.E.C. from providing equipment as per the intent of the plans and specifications.
- D. Owner shall not be responsible for any equipment ordered or prior to receipt of Consultant approved brochures or shop drawings.
- E. If applicable, the F.S.E.C. shall visit site to verify requirements of existing or relocated equipment prior to submittals.

1.09 BUYOUT BROCHURES:

- A. As soon as possible, prepare a buy-out equipment brochure in PDF format with copies of manufacturer's specification sheet or literature on each item, along with a list of the model, manufacturer, quantity, connections required, accessories, etc. for each item and component or accessories. Material on all items shall be assembled in order and no consideration will be given to partial lists submitted from time to time.

1.10 ROUGH-IN DRAWING AND MECHANICAL DATA:

- A. As soon as possible, submit an electronic drawing in PDF format at 1/4" scale to locate accurately the utility connections for each item of equipment requiring water, gas, electrical, and drain. Listed on the drawings shall be dimensions to required utilities and located from a center line of a structural column or another positive reference point.

- B. Upon final approval of data, distribute copies to all trades, Owner, Architect, health department, etc. as required.
- C. Drawings shall be at 1/4" scale or larger and indicate each electrical and mechanical roughing-in required for all new and/or relocated or future or purveyor supplied (the Owner shall provide proper data on purveyor supplied equipment) food service equipment as listed in the plans or specifications. Include all electrical and convenience outlets, gas, water, steam, ventilation, drains, floor depressions, wall openings, weights, ceiling recess or access panels, sleeves, beverage lines, roof data, refrigeration, etc.
- D. Furnish all necessary assistance to the various trades and be responsible for the proper location of sleeves and conduits through which the utility lines are to be drawn. A field inspection shall be made before the finished floors are laid to make any necessary relocations of the utility sleeves, rough-ins and conduits, and immediate written notice shall be provided if rough in problems have occurred.

1.11 SUBMITTALS OF SHOP DRAWINGS:

- A. Completely detail and submit shop drawings (s.s. fabrication, fire protection, ventilation, plastic laminate fabrication, walk ins, sneeze guards, cafeteria serving counters, hoods, etc.) in electronic PDF format showing all items to be provided under this section of the specifications. Drawings to be submitted for review at 1/2" per foot scale or larger. Upon final review of data, distribute copies to all trades, Owner, Architect, etc. as required.
- B. The drawings shall show all elevations, sections, dimensions, mechanical and electrical requirements, related details of construction, installation and related work which require cutting, close fitting, etc. as required for installation.
- C. Submit proper notifications in writing of any departures from the contract drawings or specifications which may be necessary to permit installation of the equipment. Fabrication should not be started until after final approvals are received and final field measurements are taken.

1.12 MAINTENANCE MANUALS

- A. At time of demonstration, provide to the person in charge of the kitchen a minimum of three bound current copies of kitchen plans, roughing-in drawings, any and all warranties, instructions, parts lists, operating instructions for each piece of mechanical equipment, as built shop drawings, and "Buy-Out" brochures.
- B. Manuals shall include a typewritten list in the front of the manual listing the names, addresses, and telephone numbers of local servicing agencies and manufacturer's representatives for all equipment.

1.13 SAMPLES

- A. Submit all required samples for approval, if required, of all hardware, plastic laminate, paint, etc. before starting fabrication. Other samples shall be supplied as required.

1.14 MEASUREMENTS

- A. Measurements required to size and place the food service equipment shall not be taken from drawings but shall be made at the structure from the actual spaces reserved therefore, and giving due consideration to any architectural, structural or mechanical discrepancies that may occur during construction of the building. Verify size of all of Owners equipment and small wares (dishes, trays, pans, etc.) and Purveyor supplied equipment (urns, soda systems, beverage dispensers, etc.), if applicable. Field dimensions shall be taken at the earliest opportunity so as not to delay deliveries.
- B. Verify in field any and all measurements before doing any work on equipment that may be

affected by the physical conditions and be responsible for the correction of same.

- C. Inspect equipment for proper operation prior to relocation. Advise if equipment is defective or needs rework which is not included in the original contract and submit a written quotation for said work.
- D. Coordinate Owners and/or Purveyor supplied equipment (coffee makers, beverage equipment, cash registers, soda equipment, etc.) as required for rough-in data, installation, etc.
- E. Measurements for tight fitting equipment shall allow no more than 1/4" between wall and equipment that shall be trimmed and/or sealed as required.

1.15 WARRANTY

- A. Provide a written warranty for all equipment against defects in workmanship and material for one (1) year from date of substantial completion and acceptance, excluding refrigeration units which shall carry an additional four-year warranty and a ten-year warranty on all walk-in panels. This shall cover any replacements and/or repair costs of such defective material, including transportation, labor, and materials for all equipment. This one-year free service, warranty and guarantee shall be available within 24 hours of notification on all equipment except refrigeration.
- B. Provide one-year free service, warranty and guarantee within 12 hours of notification on walk-In refrigeration and units must be operational within 24 hours after service call.
- C. This warranty is not intended to cover equipment which has been overly abused or items that have not had proper periodic maintenance (door gaskets, uncleaned refrigeration condensers, etc.) during the one-year period.

1.16 DELIVERY AND STORAGE

- A. Furnish all labor, material, equipment, etc. as required to unload and store all equipment.
- B. No equipment shall be delivered to the site unless it has been ascertained that storage space is available.
- C. Make all arrangements to deliver, unload, and store all equipment and shall assume all responsibility for safeguarding the equipment until it is accepted by the Owner.
- D. Unless noted in the item specifications, remove and store any existing and/or relocated equipment that is removed from the kitchen during the construction period.

PART 2 - GENERAL SPECIFICATIONS - PRODUCTS

2.01 MANUFACTURER'S STANDARDS

- A. It is the intention of these specifications to provide a type of equipment conforming to manufacturer's standards and only minor variations in construction will be accepted, provided that these variations do not detract from the finished appearance, durability, general function or in any way affect general overall size, capacity, strength, etc. of equipment.
- B. Manufacturer's catalog designation of material and/or fabricated equipment used in the following specifications are intended to illustrate and represent the standards which will be required by the owner. Equipment furnished must closely conform thereto in design, construction, capacity, and function to make and model called for. Where such catalog designations are given, the items shall be complete as described and shown in the catalog unless exceptions are in itemized specifications.
- C. When more than one manufacturer is listed in the Item Specification, only one manufacturer

shall be acceptable for items of a similar nature (fabrication, cooking equipment, refrigerators, shelving, carts, etc.) to insure uniformity of design, installation, service, etc.

2.02 FABRICATION STANDARDS

- A. Unless noted under itemized specifications or on plans, the following specifications shall govern the construction of all fabricated and buyout equipment and installation and shall apply to the individual item as if it were written therein in its entirety.

2.03 FABRICATED EQUIPMENT

- A. It is required that all custom fabricated items (counters, tables, sinks, dish tables, etc.) described in the plans and specifications, other than by name and catalog number, be constructed of 300 series stainless steel and be manufactured by one fabricator (Metal-Masters Inc, Advance Tabco Co., Kevry Co., SSP Co., LTI Co., John Boos, Keystone Co., Titan Co. and McCallum Co. are approved fabricators) with the plant, personnel and engineering facilities to properly design, detail, and manufacture high quality kitchen equipment.
- B. All work in the above category shall be standard unit assembly, by one foodservice equipment manufacturer of uniform design, material and finish.

2.04 BACKSPLASHES

- A. Where edges of the top are adjacent to walls, column, equipment or enclosures, they shall be turned up to provide a backsplash which shall be tight fitting (1/4" or less). Unless noted, all backsplashes shall be formed by turning up 10" and flanged back 2-1/2" at 45 degrees and down 1" and attach to wall with 6" by 2" s.s. "Z" clips on 3'-0" centers. Ends of backsplash shall be fitted with closure plates. Weld a full s.s. enclosure panel for exposed rear backsplash.
- B. Tops adjacent to refrigerators, ovens or cabinets shall be turned up 4" with top edges feathered slightly to form a tight fit of 1/4" or less. Seal with mastic compound.

2.05 BOLTS, SCREWS AND RIVETS

- A. All exposed surfaces of equipment shall be free of bolt, screw and rivet heads. Wherever bolts are used to fasten tops and trim to paneling, body of counters and similar equipment, such bolts shall be of an approved type and shall be corrosion resistant metal of the same alloy as the metal to which they are fastened with acorn type nuts to eliminate sharp edges.

2.06 CASTERS

- A. Provide heavy duty casters with double ball bearing raceways, heavy gauge fork and races and have minimum capacity of 250 pounds per caster. Casters shall be provided with brakes. Wheel shall be non-marking urethane.

2.07 CODES AND SANITATION

- A. All food service equipment under this contract shall meet the requirements and bear the label of the National Sanitation Foundation. Specifications set forth are considered minimum and are to be superseded by any superior requirements in effect as of this date by the National Sanitation Foundation or the State Health Department. Any differences of opinion on sanitation shall be referred to the State Health Department for arbitration.

2.08 CORNERS

- A. All corners shall be fully rounded and made integral and of the same sheet as the top and rolled edges. Radii of all rolled edges to be equal and rolled 2" diameter at least 180 degrees. Filler pieces or soldering shall not be used in place of all welded, seamless construction.

2.09 CUTTING BOARDS

- A. Provide Read Products or Mapletex Co. 1/2" minimum thick reversible boards as per plan as manufactured by Read Products Inc. when attached to grills or similar equipment, provide s.s. mounting brackets.

2.10 DISHTABLES

- A. Provide NSF approved series SC-DT dish tables with 14 gauge 304 s.s. coved corner construction as manufactured by Metal-masters Co. or equal with 10" backsplash as previously specified where adjacent to walls and remainder of tables to have 3" high roll rim and be mounted on 12 gauge under-channeling, 16 gauge s.s. cross rails and legs with s.s. gussets and s.s. adjustable bullet feet and/or flange type feet. Tops shall be pitched to dishwasher to avoid standing water and undersides shall have sound deadening material and be attached to walls with s.s. "Z" clips.
- B. Provide removable 18 gauge s.s. under-shelving which has 2" rolled up edges at rear and roll down edge at front and be supported on s.s. cross rails on all sides. Notch all corners to fit legs and piping. Under-shelving shall not interfere with booster heater or adjacent equipment.
- C. Provide s.s. recessed drain trough with drainer in all soiled dish tables. Unit shall not interfere with dishwasher control panels or adjacent equipment.
- D. Disposer cones and/or scrapping trough shall be integrally welded into top and also provide s.s. brackets for switch and holes in backsplash return for vacuum breaker. Trough shall be size and shape as per plan by 6" deep with coved corner construction and sloped to disposer. Provide 20" long s.s. pan formed removable trough covers. Provide T&S Co. 2905 water inlet at shallow end of trough and every 3'-0" and at change in directions. Inlets shall be controlled by a 2600 mixing valve mounted on a s.s. bracket mounted under dish table and be interconnected to water line and solenoid so water flows thru inlets when disposer in operation.
- E. Provide integral s.s. pass thru sill extending thru wall as per plans and specifications with flat side splashes and turn down front with closed ends. Provide 1" rear turndown at table at 30 degrees so sill is higher than dish table. Provide wood bracing on sill as required for support. Verify requirements of roll up door by prior to installation of tables.
- F. Provide raised roll rim in lieu of 3" high roll rim at front edge of soiled dish table when used as a pass thru dish deposit area.

2.11 DOORS:

- A. SLIDING DOORS - Sliding doors shall be constructed of 16 gauge s.s. or material listed in the item specifications with roller bearing slides.
- B. SINGLE PAN - Construction, 16 gauge s.s. with 3/4" thick sound deadening fiberglass between the two thicknesses of metal. Back panel to be 20 gauge steel. Door to operate on top hung ball bearing rollers. Bottom edge of doors to be square and fitted with a groove that rides over a s.s. pin at center point.
- C. All doors shall be fitted with stops and locks. Handles shall be die stamped s.s. flush mounted.
- D. HINGED DOORS - All hinged doors for cabinet bodies and enclosed bases shall be double pan construction. Doors shall be flush mounted and be fitted with s.s. piano type full length hinges. They shall be furnished with friction catch and s.s. recessed handles, locks, and two rubber button noise eliminators, one at each corner on handle side.

2.12 DRAWERS:

- A. All drawer inserts shall be coved corner die stamped out of one piece of 18 gauge s.s. or plastic and shall set loosely in a channel frame so it can be lifted out for cleaning. Top edges are to be flanged out 1/2".
- B. The supporting frame shall be welded steel channel with s.s. drawer face welded to frame so there will be no exposed screws or rivets on the face which shall extend 3/4" out at top and down 3/4" with 1/2" hemmed edge and radius corners to form drawer handle. Provide two rubber button shock stop noise eliminators one on each side of the drawer face at the top.
- C. Provide heavy duty s.s. drawer slides with heavy duty s.s. ball bearing wheels. Slides and frame to be so designed as to allow full opening of drawer and to be reinforced to support 150 lbs. when fully extended.
- D. Adjustable stops are to be provided for each drawer at the fully open position. Drawers on open base tables shall be enclosed in an 18 gauge housing of steel. Drawer guides are to be sloped to provide self-closing action.
- E. All drawers shall be 20" by 20" by 5" deep.

2.13 FIELD JOINTS:

- A. All field joints shall be welded with rod of same basic composition as sheets or parts welded. Welds shall be free of pits, cracks, cross graining or discolorations and shall be ground and polished to the original finish of the metal. No soldered or bolted joints shall be used unless noted in item specifications and shall be properly sealed and bolted.

2.14 GRINDING AND POLISHING:

- A. All exposed welded joints shall be ground flush with the adjoining material and neatly finished to harmonize therewith. Services shall be free of depressions. Wherever sheared edges occur, they shall be free of burrs, projections and fins to eliminate all danger of cutting or laceration when the hand is drawn over such sheared edges. Where miters or bull nosed corners occur, they shall be neatly ground to a uniform condition, and in no case will overlapping material be acceptable. All exposed surfaces shall be satin finish except rim which shall be a highly polished and buffed finish. Satin finish shall be comparable to the commercial mill finish known as No. 4 for s.s. No cross graining on equipment is acceptable.

2.15 GUARDS

- A. All machines shall be furnished fully enclosed with guards built in accordance with safety codes and regulations of State or Governmental agency having jurisdiction.

2.16 INTERIOR SHELVES:

- A. All interior shelves in cabinet bodies and enclosed bases shall be 18 gauge s.s. or as called for in the itemized specifications. Turn up on back and ends of shelf shall be 1-1/2" high and coved on 3/4" radius. The front edge shall be turned down 1-1/2" and back 1/2". All shelves shall be rigidly reinforced below to prevent sagging. Provide ferruled cutouts in shelves for drain lines, conduits, etc.

2.17 LEGS - FEET - FRAMES:

- A. All legs and pipe stands for open base tables, dish tables, etc. shall be constructed of 16 gauge s.s. tubing unless noted, with cross rails and braces of the same materials. All joints between legs, under-shelves and cross braces are to be welded and ground smooth.
- B. Cross rails must be supplied to reinforce each leg. Legs anchored to gussets at top only and without cross rails are not acceptable. Pipe stands and frames furnished on all pipe base fixtures shall have legs of 1-5/8" O.D. 16 gauge s.s. tubing, cross rails of 1" O.D. 16 gauge s.s.

tubing unless noted.

- C. Top of stand shall be fitted into s.s. gussets welded to reinforcing structure on underside of the table top, spaced not over 3"-6" on centers.
- D. All legs shall be fitted with adjustable s.s. bullet shaped feet with bottom of pipe legs to be finished off smoothly and overlap the stem to provide sanitary fitting and prevent the accumulation of grease or other debris at this joint. Provide s.s. flange type feet securely anchored for island style counters, sinks, etc.
- E. All pipe legs or vertical members are to be set back from edge of table tops a sufficient distance to offset any interference with workers, walls, columns or other equipment.
- F. Provide 6" adjustable legs with adjustable s.s. bullet foot for fabricated and/or buyout equipment with minimum capacity of 1500 pounds each.

2.19 MATERIALS AND STRUCTURAL SHAPES:

- A. Angles, bars, channels, piping, pipe legs, etc. used shall be uniformly ductile in quality and free of hard spots, runs, checks, and other surface defects. Except as otherwise specified, all such sections shall be milled steel galvanized by the hot dip process, all free of runs and blisters, uncoated spots or patches. S.S. shall be 18-8 composition (302 alloy) standard with No. 4 finish and polished to 180 grit and welded as previously specified. Provide butyl sealant sound deadening between tops and all structural supports or as required.

2.20 NAME PLATES

- A. Each item of equipment shall have a corrosion resistant metal name plate with model number, serial number, name and address of the manufacturer securely fastened to equipment in a non- conspicuous area. All mechanical and electrical controls, switches, disconnects, remote compressors, etc. shall be labelled with metal or engraved phenolic plastic signage.

2.21 OVERSHELVES AND WALL SHELVES:

- A. Provide 10" wide NSF 16 gauge s.s. over-shelves or wall shelves unless noted in the plans or item specifications. Provide wall mounted shelves with rear and sides to be turned up square 1" and front edge to have sanitary roll rim. Provide heavy gauge s.s. wall mounting brackets 6" from ends of shelf with maximum of 4'-0" on centers.
- B. Provide all over-shelves with sanitary rolled edges and bull nose corners on all four sides unless equipment is mounted on shelf (microwave, toaster, dishes, etc.) and provide 1/2" turn up at rear for that portion of the over-shelf. Provide s.s. tubular support standards as required for shelf mounted equipment and with provisions for mounting to table or counter top.
- C. Provide all wall backing and/or structural support as required for shelves to support 50 pounds per square foot and coordinate installation of same with trades.

2.22 PAINTING

- A. All galvanized material and black steel shall be thoroughly cleansed of all oil and foreign matter and given two (2) coats of enamel paint as selected.

2.23 ROLLED RIMS AND EDGES

- A. Standard roll rim shall be coved up 3" with 1/2" diameter roll at 180 degrees and bullnose corners.
- B. Square edge shall be turned down 2" at 90 degrees with 3/4" tight hem at bottom.
- C. Marine edge shall be turned up 1/2" on a 45 degree angle and turned down 2" with 3/4" tight

hem at bottom.

- D. Wherever table tops are used in connection with sinks, the top shall be fabricated with a 1/2" high raised roll rim spillage edge unless otherwise specified. Top to be integrally raised approximately 1/2" at all edges and then rolled down 2" at 210 degrees with bull nose corners.

2.24 REINFORCED STRUCTURES:

- A. Counter, table, and cabinet framework shall be constructed of steel angles horizontally and channels vertically, made in sections to permit assembly on job with tops field welded. Vertical fronts and sides of cafeteria counters and similar enclosures are to be reinforced with channels on approximately 3'-0" centers to support the tray slide brackets.
- B. Unless otherwise specified, angles or channel frames and similar cross bracing on not over 2'-0" centers to be provided under all counter and table tops to stiffen tops and furnish fastening supports for leg flanges.

2.25 SINKS:

- A. Provide 14 gauge s.s. coved corner sink bowls integrally welded as per plan with welded seamless construction with scored bottom towards a die stamped drain outlet with a Fisher lever handle waste and connected overflow located 1" below drain board and shall not interfere with plumbing, adjacent walls, equipment, etc. Provide 14 gauge s.s. bracket for drain stem. All multiple compartment sinks shall be double walled construction. When sinks are built into enclosed base counters, provide access holes for lever waste handle stem.

2.26 TABLE TOPS:

- A. METAL - Metal table tops to be 34" high and be constructed of 14 gauge 302 s.s. with NSF roll rim construction and bull nose corners unless otherwise noted. All seams and coved corners shall be welded, ground smooth and polished. Provide ferruled access holes for cutouts for water lines, cords and plugs, etc. as required in table tops, counter tops, urn stands, etc. All open base tables shall be reinforced with 12 gauge angles or channels. Provide welded cross angle or channel members shall be placed at each pair of legs with gussets, welded cross rails and feet as previously specified.
- B. One angle runner, running lengthwise shall be provided on tops up to 30" wide; two provided on tops over 30" wide. All tops shall be reinforced so that there will be no noticeable deflection and all reinforcements shall be stud welded to the underside of the top. No rivets or bolts to be used through the top. Provide sound deadening material between tops and reinforcing members and underside of tops. Field joints are to be provided in the top where necessary.

2.27 UNDERSHELVES:

- A. The under-shelves on open base tables, dish tables, etc. shall be a solid removable 16 gauge s.s. shelf unless noted in the itemized specifications. Shelf is to be turned up at rear and down on all front and side (down on all island units) edges 1-1/2" with corners at legs cut out and mounted on the support stringers on all four sides. Provide ferruled access holes as required for drain lines, water lines, conduits, etc.

2.28 WATER INLETS:

- A. Water inlet locations shall be located above positive water level to prevent syphoning of liquid into the water system.
- B. Wherever conditions require water inlet placed below water level, a suitable pressure type syphon breaker or double check valve shall be placed on fixture to form a part of same to prevent back syphoning.
- C. Exposed syphon breakers shall be chrome plated units with chrome plated piping and slip

flanges where exposed.

2.29 MECHANICAL/ELECTRICAL MATERIALS REQUIRED IN FOOD SERVICE CONTRACT:

A. The equipment supplier shall include materials properly labelled and packaged as follows:

B. PLUMBING APPURTENANCES:

1. Check requirements for gas, water, steam, etc. on job before ordering equipment. Information shown on drawings or specifications does not relieve contractor of this responsibility.
2. Faucets, pre-rinse units, lever wastes, vacuum breakers, to be as manufactured as described in the item specifications.
3. Except as otherwise specified, provide each sink compartment with deck type or backsplash type faucet with minimum 12" swing spout soft flow. Where multiple sink compartments are provided, faucets may be located between compartments.
4. C.P. brass overflow fittings shall be 1-1/2" tubing fully connected to sinks at factory with lever handle quick opening wastes with tailpieces on each sink compartment.
5. Provide all solenoids, C.P. atmospheric or pressure type vacuum breakers with C.P. stems above counter tops, shock absorbers, check valves, mixing valves, gas regulators, etc. required by code or for proper operation of equipment with mounting brackets as required. Valves shall be installed where required, accessible and convenient to the operator.
6. Provide swivel gas hoses assemblies 36" or of proper length as required with quick disconnect, ball valve, caster floor locks and 3000 pound coiled restraining device, and wall brackets.
7. All steam equipment shall have valves provided with heat resistant handles, traps, gauges, etc. as required for proper operation

C. ELECTRICAL APPURTENANCES:

1. Check voltage on job before ordering equipment. Information shown on drawings or specifications does not relieve contractors of this responsibility.
2. Except where noted under item specifications, current characteristics for motors 3/4 HP or less, solenoid valves and lighting shall be 120 volt, single phase, 60 cycle, A.C. Unless otherwise noted under item specifications, motors 3/4 HP and over shall be wound for 208/240 volts, three phase, 60 cycle, A.C.
3. Provide 120 volt control circuit on all equipment that operates on voltages on or over 208 volt. All equipment requiring 120 volt control circuits (120/480 volt, 120/208 volt, etc.) shall have transformers pre-wired on equipment.
4. Cords and plugs and receptacles for equipment shall be three or four wire all rubber coiled retractable style cord with ground as required and match receptacles provided and as best suited for the equipment. Units shall be mounted in NEMA type enclosures as per code with s.s. faceplates and boxes where receptacles are exposed.
5. Thermostats, unless otherwise noted on plans or in the item specifications, shall be provided at all equipment (bain-marie, urns, dish machines, hot food table, warming cabinets, etc.) with thermostatic control.
6. Heating elements to be of voltage and phase as specified or as required to suit job.
7. Controls, thermostats, switches, contactors, low water cut off, light fixtures and bulbs, etc., necessary for the installation and proper operation of equipment shall be furnished as required

along with all starters and/or motor control switches for the proper function of the equipment specified. Controls mounted on vertical surfaces shall be recessed.

8. Controls that are an integral part of equipment shall be factory installed. Controls which are to be separately mounted shall be shipped loose for field installation. Coordinate all field installation so as to not interfere with access and/or operation.
9. Provide properly sized magnetic starters line voltage type with thermal overload relays and reset for normal operation by automatic control or pushbutton station for 208/240 volt control. Enclosures shall be general purpose NEMA type 1, A.C. voltage, unless located outdoors which will require a waterproof enclosure. Remote control motors shall have magnetic starters.
10. Disconnect switches shall be type non-fusible, single throw, heavy duty industrial, quick make, quick break. Circuit breakers may be used in lieu of above disconnects as per code.
11. Provide equipment with required internal wiring between elements, switches, motors, receptacles, starters, etc. complete to a junction box. Disconnect, starter, etc. as required and are to be "left ready" for final connections. All control circuits shall be 120 volt to ground.

PART 3 - GENERAL SPECIFICATIONS - EXECUTION

3.01 INSTALLATION AND MATERIALS:

- A. All work required under this section shall be installed by the proper trades having jurisdiction in this area concurrent with job progress, Construction manager scope of work and related field conditions. Such installation shall be under the direction of a competent supervisor. A site inspection is recommended prior to bidding if applicable.
- A. Provide for the conveyance, uncrating, erection, assembling, setting in place, trim, cutting of holes and ferrules in equipment for piping, drains, electrical outlets, etc.
- B. Coordinate installation with all trades, repairing of any damage done to equipment during installation, removal of debris created by installation, startup, testing, and cleaning of all equipment (new, existing, or relocated).
- D. Where necessary to move equipment to make final connections, coordinate and assist all in moving equipment and be on the job to carefully level and adjust equipment as the connections are being made. During installation, coordinate with all trades on connection details and be responsible for meeting the individual equipment manufacturer's connection requirements. Report any infractions of installation procedure in written form.
- E. The fit of all equipment as it joins all walls, floors, and corners shall be tight (within 1/4") to adjacent walls, seal all equipment with NSF approved clear sealing compound and/or s.s. trim molding of proper size with concealed fasteners. Inspect the site and advise in writing and/or on shop drawings all necessary building requirements door sizes, etc. to receive the equipment and assure accuracy of fit and installation.
- E. All cabinet bases and pieces of equipment which are to be set on bases or machine platforms shall be set into a sealing compound of color to match the tile mortar. Enclosures, backsplashes, and turn-backs to wall shall be pressed into a ribbon of the same material with the excess wiped out to a radius fillet. Where necessary, and to eliminate shifting and the subsequent breaking of this seal, item shall be anchored to floor and wall with suitable masonry anchors. All equipment with utility connections (island style sinks, dish tables, etc.) shall also be anchored to floor with s.s. flange type feet.
- F. All equipment and materials shall be new, of prime quality, full gauge thickness of compositions indicated by names or abbreviations stated in itemized specifications.
- G. Equipment batteries of one manufacturer are to be pre-fitted at the factory and provide photographic proof of such work.

- H. If equipment is noted as relocated or removed during the construction period, said equipment shall be disconnected and be re-connected as directed in the Construction Manager scope of work and removed and stored unless noted in the item specifications. Coordinate and supervise this work and label equipment for reuse. Reinstall and clean equipment as per the plans and specifications. Existing equipment not scheduled for reuse shall be removed as directed in the Construction Manager scope of work.

3.02 LIMIT OF OTHER SUBCONTRACTORS/TRADES RESPONSIBILITY:

A. Plumbing:

1. Provide rough-ins and piping with stop valves, elbows, nipples, couplers, traps, waste vents, gas regulators, for water, steam, gas, etc. and make final connections to the equipment as directed in the Construction Manager scope of work.
2. Install equipment accessories (faucets, lever wastes, solenoids, valves, gas hoses, nipples, etc.) as directed in the Construction Manager scope of work.
3. Provide water heater and janitors sink unless otherwise indicated on the plans as directed in the Construction Manager scope of work.
4. Disconnect and reconnect relocated equipment if applicable as directed in the Construction Manager scope of work.

B. Electrical:

1. Provide rough-ins, controls, panels, switches, wall receptacles to match equipment cords and plugs, starters, junction boxes, canopy light and fan switches, conduit, wiring, wall outlets, disconnects, etc. and make final connections to the equipment as directed in the Construction Manager scope of work.
2. Install equipment accessories (cords, wiring harness, switches, etc.) in conduit as required by code as directed in the Construction Manager scope of work.
3. Disconnect and reconnect relocated equipment as directed in the Construction Manager scope of work.

C. General:

1. All concrete platforms, bases, etc. will be provided as directed in the Construction Manager scope of work. Grouting of drip pans and/or floor troughs to be installed as directed in the Construction Manager scope of work.
2. All required holes and recesses for piping and ducts will be coordinated with all trades and as directed in the Construction Manager scope of work. Provide location, size, etc. This information is to be provided in adequate time to be incorporated in the work.
3. Unless stated in the item specifications, provide all floor recesses, insulated sub floors, tile floors and vapor barriers for walk-ins as noted in the plans and as directed in the Construction Manager scope of work.
4. If applicable, remove relocated equipment from kitchen and store in adjacent area during

Kitchen construction period. Coordinate removal, inspection, storage, labeling, etc. of equipment. Reinstall relocated equipment as per plan after construction is completed as directed in the Construction Manager scope of work.

5. Provide fire rated walls in kitchen for cooking equipment exhaust hoods and non-combustible materials within 18" of top of hood or as required by fire codes as directed in the Construction Manager scope of work.

3.03 TESTING:

- A. After installation and hook, inspect, start up, clean, adjust and test all equipment under operating conditions for 48 hours prior to acceptance by Owner. If inspection or test shows defects, such defects shall be corrected and inspection and test repeated. Certify in writing that all equipment is performing in full compliance with the plans and specifications.

3.04 DEMONSTRATION:

- A. After utility connections to the equipment is completed, schedule and conduct the inspection and start up and final test of equipment prior to final inspection. Schedule the demonstration with the Owner and perform the demonstration in the presence of the Owner and/or their authorized representative with a minimum of seven days notification to owner.
- B. Before final inspection, remove any and all protective covering from his work and give all parts of all equipment a thorough cleaning and servicing, leaving items free from defects and remove trash from premises.
- C. Provide required competent personnel for two eight-hour periods as instructors to operating and maintenance personnel on the safe and proper operation and maintenance of all equipment. Provide additional instructions up to eight additional hours during the one-year guarantee period as requested by the Owner.
- D. Present all maintenance manuals and as built drawings as previously specified or requested by Consultant.

3.05 FINAL INSPECTION AND PUNCH LIST:

- A. After installation is completed and tested, notify the Consultant who will review all equipment and submit a repair or punch list of all items that are not in compliance with the documents. All items shall be completed immediately and not to exceed 14 days unless written notice is submitted and approved.

3.06 SCHEDULE OF EQUIPMENT:

- A. The following specifications refer to items of food service equipment on the drawings which shall form a part of these specifications and are binding as written herein, and will indicate the required quantity, size, etc. of each item.

Item Specifications:

Item #101 – Roll-in Refrigerator – Qty. of 1

Base Manufacturer: Traulsen Co.

Base Model: RRI232HUT-FHS

Alternate Manufacturer: None

Minimum specifications:

1. Unit to operate on 120 Volt with cord and plug and top mount compressor.
2. Stainless steel exterior and interior with locking doors hinged as shown on plan.
3. Digital thermometer.
4. Removable, interior mounted, stainless-steel guides for rack.
5. Unit to accommodate a minimum 66" rolling pan rack.
6. Provide a 5 Year warranty on compressor with and 1 Year free service plan as per G.S.

Item #102 – Utility Cart – Qty. of 2

Base Manufacturer: Cambro Co.

Base Model: BC2304S110

Alternate Manufacturer: None

Minimum specifications:

1. Unit shall be constructed of single molded, double-wall, high density polyethylene and thick injected polyurethane.
2. Heavy duty swivel casters.

Item #102A – Utility Cart – Qty. of 2

Base Manufacturer: Cambro Co.

Base Model: BC2354S110

Alternate Manufacturer: None

Minimum specifications:

1. Unit shall be constructed of single molded, double-wall, high density polyethylene and thick injected polyurethane.
2. Heavy duty swivel casters.

Item #103 - Shelving - Qty. of 3

Base Manufacturer: Inter-Metro Co.

Base Model: MQ24-G

Alternate Manufacturer: None

Minimum specifications:

1. Provide Metro-Max polymer units size and shape as per plan with four posts and shelves per section.
2. Units shall have 74" posts.
3. Post connectors, traverses and four vented shelf plates.
4. Two swivel and two locking casters.

Item #104 – Milk Crate Dolly – Qty. of 2

Base Manufacturer: Cambro Co.

Base Model: CD1313

Alternate Manufacturer: None

Minimum specifications:

1. Unit shall be constructed of single molded, double-wall, high density polyethylene and thick injected polyurethane.
2. Heavy duty swivel casters.

Item #105 - Pan Rack - Qty. of 4

Base Manufacturer: Crescor Co.

Base Model: 207-1811-C

Alternate Manufacturer: None

Minimum specifications:

1. Provide fully welded universal angle 64" high aluminum rack.
2. Two 5" heavy duty swivel casters and two 5" heavy duty locking swivel casters.

Item #106 - Dunnage Rack - Qty. of 1

Base Manufacturer: Inter-metro Co.

Base Model: HP-PD

Alternate Manufacturer: Eagle Co.

Minimum specifications:

1. Furnish and install polymer unit size and shape as per plan.
2. Connector strips.

Item #107 – Portable Table - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJLAN2448-SE

Alternate Manufacturer: Approved Manufacturer as listed in Section 2.03 of the General Specifications.

Minimum specifications:

1. Furnish and install 14 Gauge 304 stainless steel table as per G.S. size and shape as per plan by 34" high.
2. Stainless steel legs and gussets.
3. Flat sound deadened top.
4. One 15" by 20" by 5" deep roller bearing drawer assembly with plastic or stainless-steel insert.
5. 16 Gauge stainless steel under shelf.
6. 5" heavy duty locking casters.

Item #201 – Trash Bin – By Owner

Item #202 – Worktable - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJLAN30-SE-BS

Alternate Manufacturer: Approved Manufacturer as listed in Section 2.03 of the General Specifications

Minimum specifications:

1. Provide 14 Gauge 304 stainless steel table size and shape as per plan by 34" high.
2. Stainless steel legs, gussets, and adjustable bullet feet.
3. Sound deadened stainless steel top with 6" backsplash.
4. 16 Gauge stainless steel under shelf.
4. One 20" by 20" by 5" deep roller bearing drawer assembly with plastic or stainless-steel insert.
6. 10" deep stainless steel over shelf mounted 24" above table surface as show on plan.

Item #203 – Hot Food Cabinet - Qty. of 1

Base Manufacturer: Cres-Cor Co.

Base Model: H-137-SUA-12D

Alternate Manufacturer: None

Minimum specifications:

1. Provide stainless steel insulated cabinet that operates on 120 Volt with cord and plug.
2. Universal angles sized for 12" by 20" and 18" by 26" pans.
3. 5" heavy duty locking casters.
4. Perimeter bumpers.
5. Field reversible Dutch doors.
6. Top mounted controls.
7. Transport latch and wire transport angles.

Item #204 – Cold Food Cabinet - Qty. of 1

Base Manufacturer: Cres-Cor Co.

Base Model: R-171-SUA-10SD

Alternate Manufacturer: None

Minimum specifications:

1. Provide stainless steel insulated cabinet that operates on 120 Volt with cord and plug.
2. Universal angles sized for 12" by 20" and 18" by 26" pans.
3. 5" heavy duty locking casters.
4. Perimeter bumpers.
5. Left hinged door.
6. Top mounted controls and bottom mount compressor.
7. Transport latch and wire transport angles.
8. Provide a 5 Year warranty on compressor with and 1 Year free service plan as per G.S.

Item #301 - Convection Oven - Qty. of 1

Base Manufacturer: Blodgett Co.

Base Model: ZEPHAIRE-200-E

Alternate Manufacturer: None

Minimum specifications:

1. Double deck standard depth.
2. Electric unit that operates on 208 Volt 3 Phase with direct connections.
3. Stainless steel front and sides.
4. Door windows.
5. 5" heavy duty locking casters.
7. Two speed motors with solid state control panel with standard controls.
8. Unit to be provided with a Hoodini ventless hood. Hood shall meet UL or KNLZ listing for ventless operation.

Item #301A – Ventless Hood – Included in Item #301.

Item #302 – Roll-in Freezer – Qty. of 1

Base Manufacturer: Traulsen Co.

Base Model: RIF232LUT-FHS

Alternate Manufacturer: None

Minimum specifications:

1. Unit to operate on 120/208 Volt 1 Phase with cord and plug and top mount compressor.
2. Stainless steel exterior and interior with locking doors hinged as shown on plan.
3. Digital thermometer.
4. Removable, interior mounted, stainless-steel guides for rack.
5. Unit to accommodate a minimum 66" rolling pan rack.
6. Provide a 5 Year warranty on compressor with and 1 Year free service plan as per G.S.

Item #401 – Hot Food Table – Qty. of 1

Base Manufacturer: Duke Co.

Base Model: TEHF-60SS

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Provide 34" high unit size and shape per plan that operates on 120 Volt with cord and plug.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. Wet or dry hot food wells with drains, drain manifold with individual and master valves. Drain valves to be easily accessible from the employee side of the counter.
4. Open rear with plastic laminate front and end panels in color as selected by the Architect.
5. One 12" solid folding inverted "V" style stainless steel tray slide and one 8" stainless steel solid folding work shelf mounted on rear.
6. Set of 5" heavy duty locking casters.
7. Furnish and install BSI Co. or Premier Brass Co. Model #ZG9930 sneeze guard with brushed aluminum uprights and top mounted hardware, slim/stealth heat lamp, light, glass top, ends, and

- adjustable front. Unit shall meet current NSF standards. Center posts not acceptable.
8. Sneeze guard assembly and hot food table to be inter-wired to a common point to provide one electrical connection for entire unit and be supplied with a cord and plug.

Item #402 – Utility Counter – Qty. of 1

Base Manufacturer: Duke Co.

Base Model: TST-32SS

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Provide 34" high unit as per plan.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. open rear with plastic laminate front and end panels in color as selected by the Architect.
4. One 12" solid folding inverted "V" style stainless steel tray slide.
6. Set of 5" heavy duty locking casters.

Item #403 – Cold Food Table – Qty. of 1

Base Manufacturer: Duke Co.

Base Model: TCM-60SS-N7

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Provide 34" high unit as per plan with NSF-7 drop-in self-contained refrigerated cold pan with drain and shut off valve, on/off switch, and pan adapter bars. Unit shall operate on 120 Volt with cord and plug. Drain shut off valve to be easily accessible from the employee side of the counter.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. Plastic laminate front and end panels in color as selected by the Architect.
4. Two 12" solid folding inverted "V" style stainless steel tray slides.
5. Set of 5" heavy duty locking casters.
6. Furnish and install BSI Co. or Premier Brass Co. Model #ZG9930-2 sneeze guard with brushed aluminum uprights and top mounted hardware, light, glass top, ends, and adjustable front. Unit shall meet current NSF standards. Center posts not acceptable.
7. Sneeze guard assembly and cold food table to be inter-wired to a common point to provide one electrical connection for entire unit and be supplied with a cord and plug.

Item #404 – Spare Number

Item #405 - Milk Cooler - Qty. of 2

Base Manufacturer: Beverage Air Co.

Base Model: SMF49-1-S

Alternate Manufacturer: None

Minimum specifications:

1. Self-contained forced air unit that operates on 120 Volt with cord and plug.
2. Dial thermometer.
3. Lid locking device.
4. Stainless steel exterior.
5. Heavy duty locking casters.

Item #406 – Cashier Counter – Qty. of 1

Base Manufacturer: Duke Co.

Base Model: TCS-30SS

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Counter to be 34" high, size and shape as per plan.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. Plastic laminate front and end panels in color as selected by the Architect.
4. Two 12" solid folding inverted "V" style stainless steel tray slides.
5. Provide enclosed base with open end, one locking cash drawer and stainless-steel interior under shelf.
6. 5" heavy duty locking casters.

Item #407 – Cash Registers / POS – By Owner.

Item #501 – Spare Number

Item #502 - Hand Sink - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: HSA-10-FA-P

Alternate Manufacturer: Advance Tabco Co.

Minimum specifications:

1. 9.75" by 13.5" by 6.75" deep stainless-steel sink with fully welded side splashes.
2. Standard faucet and single foot pedal and faucet assembly.
3. Soap and towel dispenser shall be provided and installed by the Owner.

Item #503 - Pot Sink - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJLAN2660-3-18

Alternate Manufacturer: Advance Tabco Co.

Minimum specifications:

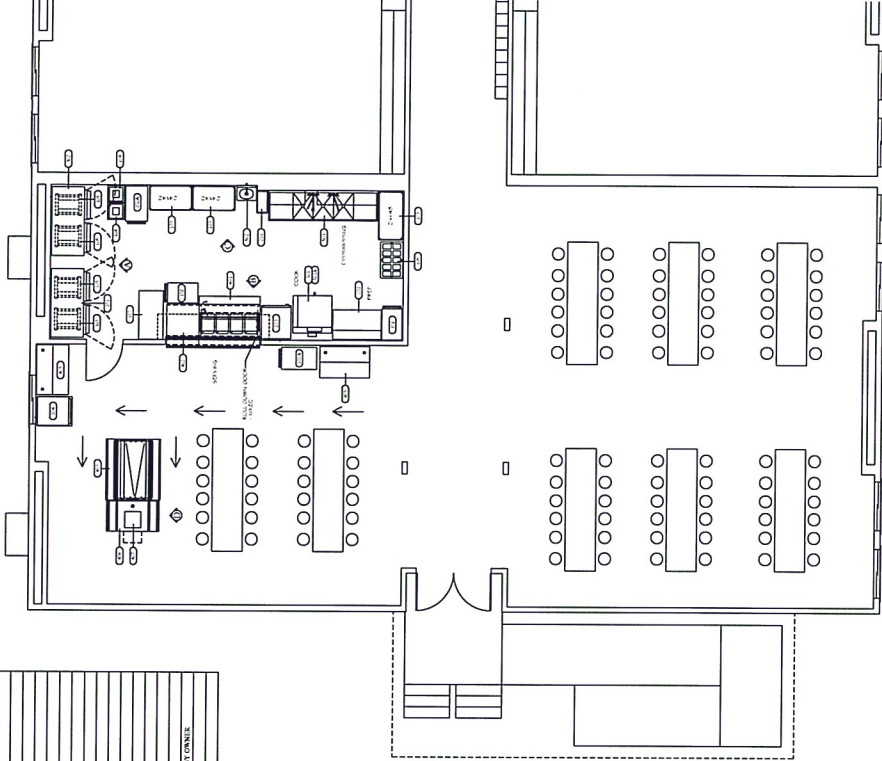
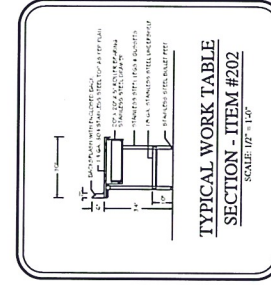
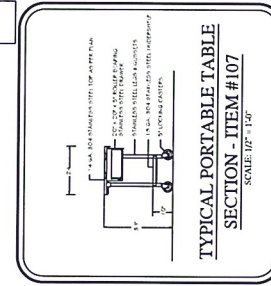
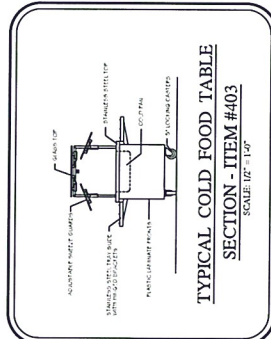
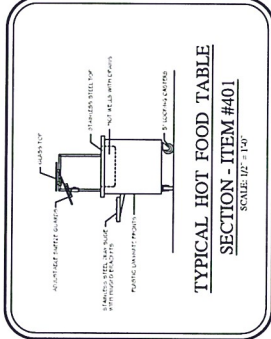
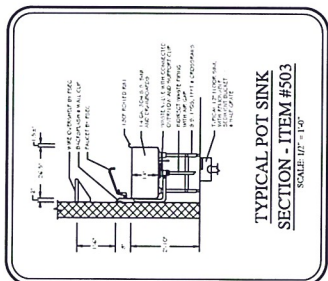
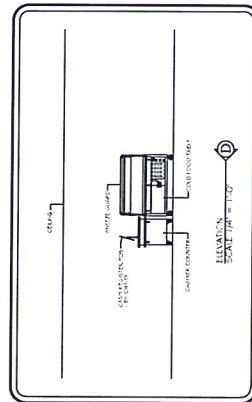
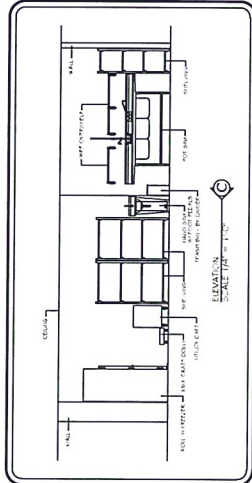
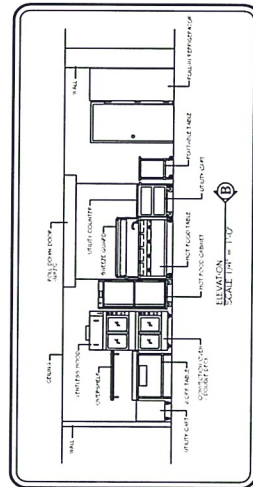
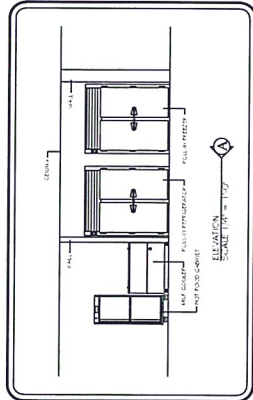
1. 14 Gauge 304 unit constructed per G.S. size and shape as per plan by 34" high.
2. 9" backsplash, 21" by 26.5" by 14" deep sinks.
3. Integral drain boards.
4. One T&S Co. 5F-8WLS12 faucet, and one 5PR-8W12-C + B-TEE-RGD spray hose unit and faucet.
5. T&S Co. B-3990-01-3X modular waste drains with connected overflows.
6. Stainless steel legs, gussets, and adjustable bullet feet.
7. Area below tables is to be furnished with 16 Gauge removable stainless steel under shelving where possible.
8. Provide 14" coated wire wall shelves and brackets mounted 24" above sink as shown on plans.

END OF SECTION 11 4000 – FOOD SERVICE EQUIPMENT

Garrett Morgan Trailer Kitchen

Food Service Equipment Purchase and Install Drawings

EQUIPMENT SCHEDULE													
Item	Qty	DESCRIPTION	CW (sq. ft.)	HW (sq. ft.)	INDIRECT DRAIN	DUCT LENGTH	GAS (sq. ft.)	MTL	DUET DUET	MTA CYR	MTA CYR	ASPG CYR	Equipment Remarks
101	1	1-CEILING FAN										1	114
102	2	1-HEAT CATH										1	
103	1	1-CEILING FAN										1	
104	2	1-HEAT CATH										1	
105	1	1-CEILING FAN										1	
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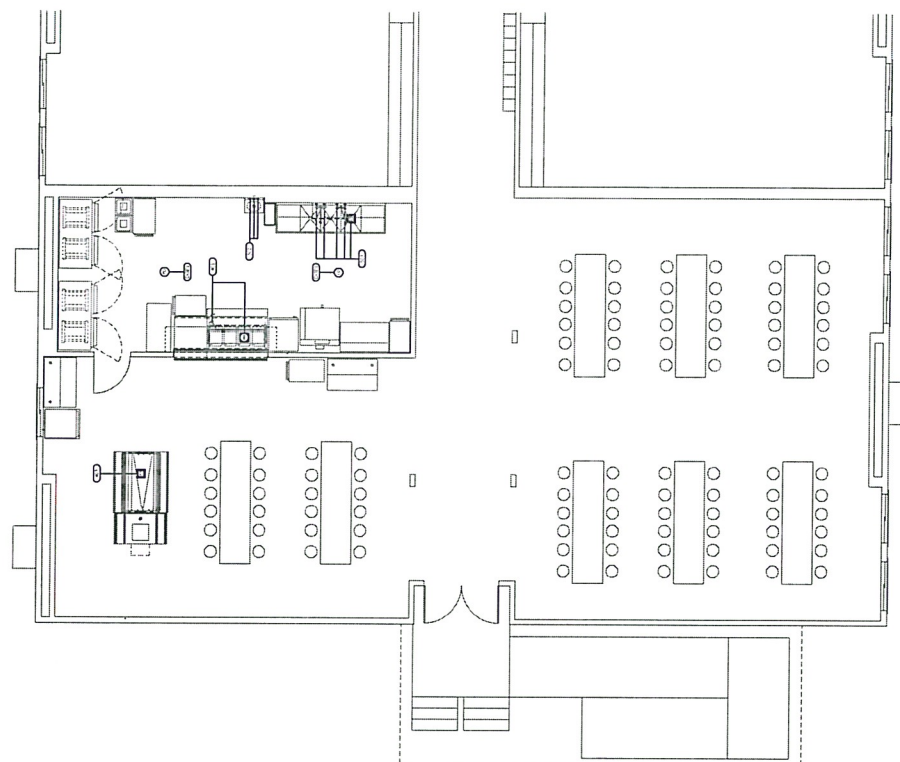
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PROJECT:
CMSD GARRETT MORGAN
PORTABLE TRAILER KITCHEN & SERVING AREA
4016 WOODBINE
CLEVELAND, OHIO 44113

SHEET TITLE:
FOOD SERVICE
EQUIPMENT
FLOOR PLAN
SCALE 1/4" = 1'-0"

DATE	PROJECT PHASE	BY
12/09/01	SCHEMATIC DESIGN	CM
02/20/02	CONSTRUCTION DOCUMENTS	CM
04/06/02	RUFS	CM
04/11/02		

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AND IS NOT TO BE
REPRODUCED, OR REUSED WITHOUT
WRITTEN PERMISSION



ARCHITECT:

PROJECT:
CMRD GARRETT MORGAN
PORTABLE TRAILER KITCHEN & SERVING AREA
4016 WOODBINE
CLEVELAND, OHIO 44113

SHEET TITLE:
FOOD SERVICE
PLUMBING
FLOOR PLAN
SCALE 1/4" = 1'-0"

DATE CODE	PROJECT PHASE	BY
12/09/21	CONSTRUCTION DOCUMENTS	CM
01/06/21	RIBA	CM
GMP TOP		

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DATE: 08/01/2011

SHEET NUMBER:
FSE-3

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H Barbara Booker Kitchen

Food Service Equipment Purchase and Install Specifications

SECTION 11 4000 - FOOD SERVICE EQUIPMENT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. All Drawings, General and Supplementary Conditions, Division 1, Specifications, and related contract documents apply to this section and the requirements may exceed those shown in this section. The Food Service Engineering Consultants on this project are JRA Food Service Consultants, LLC in Grand Rapids, Michigan (616-454-4433) and is responsible to the Architect and Owner for ascertaining that the Food Service Equipment Contractor complies with all the requirements of this section.

1.02 SUMMARY

- A. As listed in this division, the Food Service Equipment Contractor shall furnish all labor, material, work, equipment, transportation, accessories, taxes, etc. for a complete and continuous installation in accordance with the requirements of these plans and specifications and related documents.
- B. The FSEC shall familiarize themselves with local conditions affecting the cost of the work and examine the site and all Food Service Equipment contract documents including Architectural drawings, and contract documents, all of which constitute the responsibility of the FSEC.

1.03 SUBSTITUTIONS AND VOLUNTARY ALTERNATES:

- A. The first manufacturer of equipment listed in the item specifications is intended to be the basis of the base bid. All other manufacturers must conform to the specifications, size, accessories, materials, capacity, etc.
- B. A proposed substitution on any specified equipment must be submitted to the Consultant 10 days in advance of the bid date and must include all manufacturers shop drawings and data sheets on the proposed equipment. The supplier shall pay any additional costs incurred for changes, engineering services, utilities, construction, etc. that may be incurred by said substitutions.

1.04 INTERPRETATION OF DOCUMENTS:

- A. Prior to receipt of bids, all questions, clarification, and changes in the documents shall be executed by addendum. After award of contract, all changes shall be performed by bulletin.
- B. FSEC shall submit an itemized price breakdown to the Consultant on their letterhead for each piece of equipment including labor, freight, manufacturer, quantity, taxes, etc. as applicable.
- C. Any deletions of equipment by the Owner and/or Consultant prior to approval and/or release of the shop drawings, brochures, etc. shall be credited to the Owner at the itemized price as listed in the itemized price breakdown and include all equipment costs, freight, labor, taxes etc. Pricing shall not be credited at the amount listed on the Schedule of Values.
- D. Any additions to equipment by the Owner and/or Consultant that result in cost increases after approval and/or release of shop drawings, brochures, etc. shall be immediately noted by the FSEC and a written request with prices for a bulletin shall be issued by the FSEC to the Consultant.
- E. The General Specifications are applicable to items listed in the item specifications.

1.05 ABBREVIATIONS

- A. The following abbreviations are used herein unless otherwise noted on the plans or item specifications.

A	Amps
AFF	Above Finish Floor
BTC	Branch To Connection
CFM	Cubic Feet of Air Per Minute
C.P.	Chrome Plated
CW	Cold Water - 25 PSI
DCO	Duplex Convenience Outlet - 20 amp
DFA	Drop From Above
E.C.	Electrical Trades
FL DR	Floor Drain - Wade W1104
FFD	Funnel Floor Drain - Wade 1104-EF4
FL SK	Floor Sink - 12" - Wade W9144-15
FPM	Feet Per Minute
FSEC	Food Service Equipment Contractor
F.S.C.	Food Service Consultant
G	Natural Gas - 7" water column
GP	General Purpose
G.S.	General Specifications
G.C.	General Trades
HVAC	Heating Ventilation HVAC Trades
HP	Horsepower
HW	Hot Water - 140 degree - 25 PSI
J.B.	Junction Box
KW	Kilowatt
N.S.R.	No Service Required
N.I.C.	Not in FSEC contract
P.C.	Plumbing Trades
S.O.M.	Standard of Manufacturer
s.s.	Stainless Steel
SS	Steam Supply - 25 PSI
SR	Steam Return
V	Volts
VIF	Verify in field
W	Waste Outlet
W.G.	Water Gauge - Static Pressure

1.06 CONFORMITY

- A. All equipment furnished under these specifications shall be newly manufactured and installed in strict conformity with all codes, regulations and requirements of the State Board of Health, the National Sanitation Foundation Standards, or any state or local agency.
- B. All equipment shall conform to the current standards and bear the seal of UL, NEMA, ASME, AGA, OSHA, NFPA, etc. where applicable and/or otherwise conform to the requirements of the authorities having jurisdiction.
- C. Wherever the requirements of the specifications and drawings are in excess of the regulations, the specifications and drawings shall govern. Whenever the regulations are in excess of the specifications and drawings, the regulations shall govern.
- D. Wherever the requirements of the specifications are in excess of the drawings, the specifications shall govern.
- E. Wherever the requirements of the drawings are in excess of the specifications, the drawings shall govern.

1.07 PERMITS - LICENSES - PHONE CALLS

- A. Provide to the proper authorities all notices required by law, obtain all refrigeration permits, licenses, etc., and pay any legal fees necessary for the due and faithful performance of the work, and which may arise incidental to the fulfilling of the foodservice documents. The Owner shall pay for any health department plan review or license fees.
- B. Permits shall be provided as required. Refer to the Construction Managers scope of work.
- C. Accept all collect phone calls relating to food service equipment that pertain to the project until warranty has expired on the equipment.

1.08 SUBMITTAL OF BUYOUT BROCHURES AND SHOP DRAWINGS

- A. Shop drawing and brochure requirements may also be listed in the general requirements or other areas of the documents. Provide submittals as per those requirements or as listed below - whichever is greater.
- B. All shop drawings, rough-in drawings, equipment brochures, etc. shall be submitted at one time within 20 days of the notice to proceed. Said items are subject to the terms and conditions of the plans and specifications for the entire project. All drawings which are submitted for distribution shall be clear and concise and have the following notes printed on each and every sheet:

Name of the F.S.E.C.
 Name and location of the project.
 Name of the Architect.
 Name of the Consultant.
 Name of the General Contractor.
 Drawing number.
 Date of drawing and revisions.

The following statement: The (name of F.S.E.C.) is solely responsible for the accuracy and completeness of these drawings and specifications, and we approve them for construction purposes. Signed: (Officer, Partner, etc.)

- C. All submitted data shall be reviewed for general compliance only and does not alleviate the F.S.E.C. from providing equipment as per the intent of the plans and specifications.
- D. Owner shall not be responsible for any equipment ordered or prior to receipt of Consultant approved brochures or shop drawings.
- E. If applicable, the F.S.E.C. shall visit site to verify requirements of existing or relocated equipment prior to submittals.

1.09 BUYOUT BROCHURES:

- A. As soon as possible, prepare a buy-out equipment brochure in PDF format with copies of manufacturer's specification sheet or literature on each item, along with a list of the model, manufacturer, quantity, connections required, accessories, etc. for each item and component or accessories. Material on all items shall be assembled in order and no consideration will be given to partial lists submitted from time to time.

1.10 ROUGH-IN DRAWING AND MECHANICAL DATA:

- A. As soon as possible, submit an electronic drawing in PDF format at 1/4" scale to locate accurately the utility connections for each item of equipment requiring water, gas, electrical, and drain. Listed on the drawings shall be dimensions to required utilities and located from a center line of a structural column or another positive reference point.

- B. Upon final approval of data, distribute copies to all trades, Owner, Architect, health department, etc. as required.
- C. Drawings shall be at 1/4" scale or larger and indicate each electrical and mechanical roughing-in required for all new and/or relocated or future or purveyor supplied (the Owner shall provide proper data on purveyor supplied equipment) food service equipment as listed in the plans or specifications. Include all electrical and convenience outlets, gas, water, steam, ventilation, drains, floor depressions, wall openings, weights, ceiling recess or access panels, sleeves, beverage lines, roof data, refrigeration, etc.
- D. Furnish all necessary assistance to the various trades and be responsible for the proper location of sleeves and conduits through which the utility lines are to be drawn. A field inspection shall be made before the finished floors are laid to make any necessary relocations of the utility sleeves, rough-ins and conduits, and immediate written notice shall be provided if rough in problems have occurred.

1.11 SUBMITTALS OF SHOP DRAWINGS:

- A. Completely detail and submit shop drawings (s.s. fabrication, fire protection, ventilation, plastic laminate fabrication, walk ins, sneeze guards, cafeteria serving counters, hoods, etc.) in electronic PDF format showing all items to be provided under this section of the specifications. Drawings to be submitted for review at 1/2" per foot scale or larger. Upon final review of data, distribute copies to all trades, Owner, Architect, etc. as required.
- B. The drawings shall show all elevations, sections, dimensions, mechanical and electrical requirements, related details of construction, installation and related work which require cutting, close fitting, etc. as required for installation.
- C. Submit proper notifications in writing of any departures from the contract drawings or specifications which may be necessary to permit installation of the equipment. Fabrication should not be started until after final approvals are received and final field measurements are taken.

1.12 MAINTENANCE MANUALS

- A. At time of demonstration, provide to the person in charge of the kitchen a minimum of three bound current copies of kitchen plans, roughing-in drawings, any and all warranties, instructions, parts lists, operating instructions for each piece of mechanical equipment, as built shop drawings, and "Buy-Out" brochures.
- B. Manuals shall include a typewritten list in the front of the manual listing the names, addresses, and telephone numbers of local servicing agencies and manufacturer's representatives for all equipment.

1.13 SAMPLES

- A. Submit all required samples for approval, if required, of all hardware, plastic laminate, paint, etc. before starting fabrication. Other samples shall be supplied as required.

1.14 MEASUREMENTS

- A. Measurements required to size and place the food service equipment shall not be taken from drawings but shall be made at the structure from the actual spaces reserved therefore, and giving due consideration to any architectural, structural or mechanical discrepancies that may occur during construction of the building. Verify size of all of Owners equipment and small wares (dishes, trays, pans, etc.) and Purveyor supplied equipment (urns, soda systems, beverage dispensers, etc.), if applicable. Field dimensions shall be taken at the earliest opportunity so as not to delay deliveries.
- B. Verify in field any and all measurements before doing any work on equipment that may be

affected by the physical conditions and be responsible for the correction of same.

- C. Inspect equipment for proper operation prior to relocation. Advise if equipment is defective or needs rework which is not included in the original contract and submit a written quotation for said work.
- D. Coordinate Owners and/or Purveyor supplied equipment (coffee makers, beverage equipment, cash registers, soda equipment, etc.) as required for rough-in data, installation, etc.
- E. Measurements for tight fitting equipment shall allow no more than 1/4" between wall and equipment that shall be trimmed and/or sealed as required.

1.15 WARRANTY

- A. Provide a written warranty for all equipment against defects in workmanship and material for one (1) year from date of substantial completion and acceptance, excluding refrigeration units which shall carry an additional four-year warranty and a ten-year warranty on all walk-in panels. This shall cover any replacements and/or repair costs of such defective material, including transportation, labor, and materials for all equipment. This one-year free service, warranty and guarantee shall be available within 24 hours of notification on all equipment except refrigeration.
- B. Provide one-year free service, warranty and guarantee within 12 hours of notification on walk-In refrigeration and units must be operational within 24 hours after service call.
- C. This warranty is not intended to cover equipment which has been overly abused or items that have not had proper periodic maintenance (door gaskets, uncleaned refrigeration condensers, etc.) during the one-year period.

1.16 DELIVERY AND STORAGE

- A. Furnish all labor, material, equipment, etc. as required to unload and store all equipment.
- B. No equipment shall be delivered to the site unless it has been ascertained that storage space is available.
- C. Make all arrangements to deliver, unload, and store all equipment and shall assume all responsibility for safeguarding the equipment until it is accepted by the Owner.
- D. Unless noted in the item specifications, remove and store any existing and/or relocated equipment that is removed from the kitchen during the construction period.

PART 2 - GENERAL SPECIFICATIONS - PRODUCTS

2.01 MANUFACTURER'S STANDARDS

- A. It is the intention of these specifications to provide a type of equipment conforming to manufacturer's standards and only minor variations in construction will be accepted, provided that these variations do not detract from the finished appearance, durability, general function or in any way affect general overall size, capacity, strength, etc. of equipment.
- B. Manufacturer's catalog designation of material and/or fabricated equipment used in the following specifications are intended to illustrate and represent the standards which will be required by the owner. Equipment furnished must closely conform thereto in design, construction, capacity, and function to make and model called for. Where such catalog designations are given, the items shall be complete as described and shown in the catalog unless exceptions are in itemized specifications.
- C. When more than one manufacturer is listed in the Item Specification, only one manufacturer

shall be acceptable for items of a similar nature (fabrication, cooking equipment, refrigerators, shelving, carts, etc.) to insure uniformity of design, installation, service, etc.

2.02 FABRICATION STANDARDS

- A. Unless noted under itemized specifications or on plans, the following specifications shall govern the construction of all fabricated and buyout equipment and installation and shall apply to the individual item as if it were written therein in its entirety.

2.03 FABRICATED EQUIPMENT

- A. It is required that all custom fabricated items (counters, tables, sinks, dish tables, etc.) described in the plans and specifications, other than by name and catalog number, be constructed of 300 series stainless steel and be manufactured by one fabricator (Metal-Masters Inc, Advance Tabco Co., Kevry Co., SSP Co., LTI Co., John Boos, Keystone Co., Titan Co. and McCallum Co. are approved fabricators) with the plant, personnel and engineering facilities to properly design, detail, and manufacture high quality kitchen equipment.
- B. All work in the above category shall be standard unit assembly, by one foodservice equipment manufacturer of uniform design, material and finish.

2.04 BACKSPLASHES

- A. Where edges of the top are adjacent to walls, column, equipment or enclosures, they shall be turned up to provide a backsplash which shall be tight fitting (1/4" or less). Unless noted, all backsplashes shall be formed by turning up 10" and flanged back 2-1/2" at 45 degrees and down 1" and attach to wall with 6" by 2" s.s. "Z" clips on 3'-0" centers. Ends of backsplash shall be fitted with closure plates. Weld a full s.s. enclosure panel for exposed rear backsplash.
- B. Tops adjacent to refrigerators, ovens or cabinets shall be turned up 4" with top edges feathered slightly to form a tight fit of 1/4" or less. Seal with mastic compound.

2.05 BOLTS, SCREWS AND RIVETS

- A. All exposed surfaces of equipment shall be free of bolt, screw and rivet heads. Wherever bolts are used to fasten tops and trim to paneling, body of counters and similar equipment, such bolts shall be of an approved type and shall be corrosion resistant metal of the same alloy as the metal to which they are fastened with acorn type nuts to eliminate sharp edges.

2.06 CASTERS

- A. Provide heavy duty casters with double ball bearing raceways, heavy gauge fork and races and have minimum capacity of 250 pounds per caster. Casters shall be provided with brakes. Wheel shall be non-marking urethane.

2.07 CODES AND SANITATION

- A. All food service equipment under this contract shall meet the requirements and bear the label of the National Sanitation Foundation. Specifications set forth are considered minimum and are to be superseded by any superior requirements in effect as of this date by the National Sanitation Foundation or the State Health Department. Any differences of opinion on sanitation shall be referred to the State Health Department for arbitration.

2.08 CORNERS

- A. All corners shall be fully rounded and made integral and of the same sheet as the top and rolled edges. Radii of all rolled edges to be equal and rolled 2" diameter at least 180 degrees. Filler pieces or soldering shall not be used in place of all welded, seamless construction.

2.09 CUTTING BOARDS

- A. Provide Read Products or Mapletex Co. 1/2" minimum thick reversible boards as per plan as manufactured by Read Products Inc. when attached to grills or similar equipment, provide s.s. mounting brackets.

2.10 DISHTABLES

- A. Provide NSF approved series SC-DT dish tables with 14 gauge 304 s.s. coved corner construction as manufactured by Metal-masters Co. or equal with 10" backsplash as previously specified where adjacent to walls and remainder of tables to have 3" high roll rim and be mounted on 12 gauge under-channeling, 16 gauge s.s. cross rails and legs with s.s. gussets and s.s. adjustable bullet feet and/or flange type feet. Tops shall be pitched to dishwasher to avoid standing water and undersides shall have sound deadening material and be attached to walls with s.s. "Z" clips.
- B. Provide removable 18 gauge s.s. under-shelving which has 2" rolled up edges at rear and roll down edge at front and be supported on s.s. cross rails on all sides. Notch all corners to fit legs and piping. Under-shelving shall not interfere with booster heater or adjacent equipment.
- C. Provide s.s. recessed drain trough with drainer in all soiled dish tables. Unit shall not interfere with dishwasher control panels or adjacent equipment.
- D. Disposer cones and/or scrapping trough shall be integrally welded into top and also provide s.s. brackets for switch and holes in backsplash return for vacuum breaker. Trough shall be size and shape as per plan by 6" deep with coved corner construction and sloped to disposer. Provide 20" long s.s. pan formed removable trough covers. Provide T&S Co. 2905 water inlet at shallow end of trough and every 3'-0" and at change in directions. Inlets shall be controlled by a 2600 mixing valve mounted on a s.s. bracket mounted under dish table and be interconnected to water line and solenoid so water flows thru inlets when disposer in operation.
- E. Provide integral s.s. pass thru sill extending thru wall as per plans and specifications with flat side splashes and turn down front with closed ends. Provide 1" rear turndown at table at 30 degrees so sill is higher than dish table. Provide wood bracing on sill as required for support. Verify requirements of roll up door by prior to installation of tables.
- F. Provide raised roll rim in lieu of 3" high roll rim at front edge of soiled dish table when used as a pass thru dish deposit area.

2.11 DOORS:

- A. SLIDING DOORS - Sliding doors shall be constructed of 16 gauge s.s. or material listed in the item specifications with roller bearing slides.
- B. SINGLE PAN - Construction, 16 gauge s.s. with 3/4" thick sound deadening fiberglass between the two thicknesses of metal. Back panel to be 20 gauge steel. Door to operate on top hung ball bearing rollers. Bottom edge of doors to be square and fitted with a groove that rides over a s.s. pin at center point.
- C. All doors shall be fitted with stops and locks. Handles shall be die stamped s.s. flush mounted.
- D. HINGED DOORS - All hinged doors for cabinet bodies and enclosed bases shall be double pan construction. Doors shall be flush mounted and be fitted with s.s. piano type full length hinges. They shall be furnished with friction catch and s.s. recessed handles, locks, and two rubber button noise eliminators, one at each corner on handle side.

2.12 DRAWERS:

- A. All drawer inserts shall be coved corner die stamped out of one piece of 18 gauge s.s. or plastic and shall set loosely in a channel frame so it can be lifted out for cleaning. Top edges are to be flanged out 1/2".
- B. The supporting frame shall be welded steel channel with s.s. drawer face welded to frame so there will be no exposed screws or rivets on the face which shall extend 3/4" out at top and down 3/4" with 1/2" hemmed edge and radius corners to form drawer handle. Provide two rubber button shock stop noise eliminators one on each side of the drawer face at the top.
- C. Provide heavy duty s.s. drawer slides with heavy duty s.s. ball bearing wheels. Slides and frame to be so designed as to allow full opening of drawer and to be reinforced to support 150 lbs. when fully extended.
- D. Adjustable stops are to be provided for each drawer at the fully open position. Drawers on open base tables shall be enclosed in an 18 gauge housing of steel. Drawer guides are to be sloped to provide self-closing action.
- E. All drawers shall be 20" by 20" by 5" deep.

2.13 FIELD JOINTS:

- A. All field joints shall be welded with rod of same basic composition as sheets or parts welded. Welds shall be free of pits, cracks, cross graining or discolorations and shall be ground and polished to the original finish of the metal. No soldered or bolted joints shall be used unless noted in item specifications and shall be properly sealed and bolted.

2.14 GRINDING AND POLISHING:

- A. All exposed welded joints shall be ground flush with the adjoining material and neatly finished to harmonize therewith. Services shall be free of depressions. Wherever sheared edges occur, they shall be free of burrs, projections and fins to eliminate all danger of cutting or laceration when the hand is drawn over such sheared edges. Where miters or bull nosed corners occur, they shall be neatly ground to a uniform condition, and in no case will overlapping material be acceptable. All exposed surfaces shall be satin finish except rim which shall be a highly polished and buffed finish. Satin finish shall be comparable to the commercial mill finish known as No. 4 for s.s. No cross graining on equipment is acceptable.

2.15 GUARDS

- A. All machines shall be furnished fully enclosed with guards built in accordance with safety codes and regulations of State or Governmental agency having jurisdiction.

2.16 INTERIOR SHELVES:

- A. All interior shelves in cabinet bodies and enclosed bases shall be 18 gauge s.s. or as called for in the itemized specifications. Turn up on back and ends of shelf shall be 1-1/2" high and coved on 3/4" radius. The front edge shall be turned down 1-1/2" and back 1/2". All shelves shall be rigidly reinforced below to prevent sagging. Provide ferruled cutouts in shelves for drain lines, conduits, etc.

2.17 LEGS - FEET - FRAMES:

- A. All legs and pipe stands for open base tables, dish tables, etc. shall be constructed of 16 gauge s.s. tubing unless noted, with cross rails and braces of the same materials. All joints between legs, under-shelves and cross braces are to be welded and ground smooth.
- B. Cross rails must be supplied to reinforce each leg. Legs anchored to gussets at top only and without cross rails are not acceptable. Pipe stands and frames furnished on all pipe base fixtures shall have legs of 1-5/8" O.D. 16 gauge s.s. tubing, cross rails of 1" O.D. 16 gauge s.s.

tubing unless noted.

- C. Top of stand shall be fitted into s.s. gussets welded to reinforcing structure on underside of the table top, spaced not over 3"-6" on centers.
- D. All legs shall be fitted with adjustable s.s. bullet shaped feet with bottom of pipe legs to be finished off smoothly and overlap the stem to provide sanitary fitting and prevent the accumulation of grease or other debris at this joint. Provide s.s. flange type feet securely anchored for island style counters, sinks, etc.
- E. All pipe legs or vertical members are to be set back from edge of table tops a sufficient distance to offset any interference with workers, walls, columns or other equipment.
- F. Provide 6" adjustable legs with adjustable s.s. bullet foot for fabricated and/or buyout equipment with minimum capacity of 1500 pounds each.

2.18 MATERIALS AND STRUCTURAL SHAPES:

- A. Angles, bars, channels, piping, pipe legs, etc. used shall be uniformly ductile in quality and free of hard spots, runs, checks, and other surface defects. Except as otherwise specified, all such sections shall be milled steel galvanized by the hot dip process, all free of runs and blisters, uncoated spots or patches. S.S. shall be 18-8 composition (302 alloy) standard with No. 4 finish and polished to 180 grit and welded as previously specified. Provide butyl sealant sound deadening between tops and all structural supports or as required.

2.19 NAME PLATES

- A. Each item of equipment shall have a corrosion resistant metal name plate with model number, serial number, name and address of the manufacturer securely fastened to equipment in a non- conspicuous area. All mechanical and electrical controls, switches, disconnects, remote compressors, etc. shall be labelled with metal or engraved phenolic plastic signage.

2.20 OVERSHELVES AND WALL SHELVES:

- A. Provide 10" wide NSF 16 gauge s.s. over-shelves or wall shelves unless noted in the plans or item specifications. Provide wall mounted shelves with rear and sides to be turned up square 1" and front edge to have sanitary roll rim. Provide heavy gauge s.s. wall mounting brackets 6" from ends of shelf with maximum of 4'-0" on centers.
- B. Provide all over-shelves with sanitary rolled edges and bull nose corners on all four sides unless equipment is mounted on shelf (microwave, toaster, dishes, etc.) and provide 1/2" turn up at rear for that portion of the over-shelf. Provide s.s. tubular support standards as required for shelf mounted equipment and with provisions for mounting to table or counter top.
- C. Provide all wall backing and/or structural support as required for shelves to support 50 pounds per square foot and coordinate installation of same with trades.

2.21 PAINTING

- A. All galvanized material and black steel shall be thoroughly cleansed of all oil and foreign matter and given two (2) coats of enamel paint as selected.

2.22 ROLLED RIMS AND EDGES

- A. Standard roll rim shall be coved up 3" with 1/2" diameter roll at 180 degrees and bullnose corners.
- B. Square edge shall be turned down 2" at 90 degrees with 3/4" tight hem at bottom.
- C. Marine edge shall be turned up 1/2" on a 45 degree angle and turned down 2" with 3/4" tight

hem at bottom.

- D. Wherever table tops are used in connection with sinks, the top shall be fabricated with a 1/2" high raised roll rim spillage edge unless otherwise specified. Top to be integrally raised approximately 1/2" at all edges and then rolled down 2" at 210 degrees with bull nose corners.

2.23 REINFORCED STRUCTURES:

- A. Counter, table, and cabinet framework shall be constructed of steel angles horizontally and channels vertically, made in sections to permit assembly on job with tops field welded. Vertical fronts and sides of cafeteria counters and similar enclosures are to be reinforced with channels on approximately 3'-0" centers to support the tray slide brackets.
- B. Unless otherwise specified, angles or channel frames and similar cross bracing on not over 2'-0" centers to be provided under all counter and table tops to stiffen tops and furnish fastening supports for leg flanges.

2.24 SINKS:

- A. Provide 14 gauge s.s. coved corner sink bowls integrally welded as per plan with welded seamless construction with scored bottom towards a die stamped drain outlet with a Fisher lever handle waste and connected overflow located 1" below drain board and shall not interfere with plumbing, adjacent walls, equipment, etc. Provide 14 gauge s.s. bracket for drain stem. All multiple compartment sinks shall be double walled construction. When sinks are built into enclosed base counters, provide access holes for lever waste handle stem.

2.25 TABLE TOPS:

- A. METAL - Metal table tops to be 34" high and be constructed of 14 gauge 302 s.s. with NSF roll rim construction and bull nose corners unless otherwise noted. All seams and coved corners shall be welded, ground smooth and polished. Provide ferruled access holes for cutouts for water lines, cords and plugs, etc. as required in table tops, counter tops, urn stands, etc. All open base tables shall be reinforced with 12 gauge angles or channels. Provide welded cross angle or channel members shall be placed at each pair of legs with gussets, welded cross rails and feet as previously specified.
- B. One angle runner, running lengthwise shall be provided on tops up to 30" wide; two provided on tops over 30" wide. All tops shall be reinforced so that there will be no noticeable deflection and all reinforcements shall be stud welded to the underside of the top. No rivets or bolts to be used through the top. Provide sound deadening material between tops and reinforcing members and underside of tops. Field joints are to be provided in the top where necessary.

2.26 UNDERSHELVES:

- A. The under-shelves on open base tables, dish tables, etc. shall be a solid removable 16 gauge s.s. shelf unless noted in the itemized specifications. Shelf is to be turned up at rear and down on all front and side (down on all island units) edges 1-1/2" with corners at legs cut out and mounted on the support stringers on all four sides. Provide ferruled access holes as required for drain lines, water lines, conduits, etc.

2.27 WALK INS AND REFRIGERATION

- A. Provide NSF and UL approved walk ins as per the item specifications size and shape as per plan by 8'-6" high and furnished with prefabricated modular construction tongue and groove cam lock style panels for walls with coved vinyl screed, ceilings, and floors with 4" foamed in place UL-25 flame spread class No. 1 urethane insulation with a minimum "R" factor of 32 and a "K" factor of 0.121. Wall and ceiling panels shall have 0.040 stucco embossed aluminum or 20 gauge 304 s.s. finish and floor panels shall be 0.100 smooth aluminum or 18 gauge s.s. with a rating of 700 pounds per square foot with non-skid floor strips. All panels shall have a ten-year guarantee and be installed with a watertight seal. Provide 4" s.s. high coved base

molding at all exposed exterior and interior walls securely anchored and sealed as required. Provide ceiling hangers and structural supports as required.

- B. If floorless construction is required refer to the Construction Manager scope of work. Provide 4" urethane insulation and vapor barriers for sub floor and tile floor. Provide coved floor screeds below wall panels anchored to red wood vapor barriers which shall extend up thru and 1/8" above the level of the finished floor, 6 mil polyethylene vapor barrier, etc. as per the manufacturers standard requirements. Supply and coordinate installation of walk-ins to assure proper fit of floor recesses, sizes, tile, insulation, grout, vapor barriers, drainage, etc.
- C. Provide one surface mounted LED light fixture mounted above door for the first 50 square feet of floor space and one additional ceiling mounted fixture as shown on the plans. Lighting shall provide a minimum of 35 foot candles at 36" above floor. The light above door shall be inter-wired to switch and junction box, but all additional lights shall be installed and wired in field with conduit located outside the compartments.
- D. Provide 36" by 78" in-fitting doors with magnetic gaskets, three C.P. cam lift hinges, s.s. front, 24" high interior aluminum tread plate kick plate, cylinder locks, and automatic door closer. Doors shall be mounted in reinforced panel with FRP or s.s. door jambs with thermal break and thermostatically controlled heater strip, s.s. heavy gauge heated threshold, safety release, digital thermometer, and virgin plastic full width door curtains mounted 6" above door header. Provide non heated relief air vents for cooler and inter-wired heated vents for all freezer compartments mounted above doors.
- E. Provide removable closure trim with concealed fasteners of same appearance as walk-in exterior from box to all adjacent building walls and ceilings. Provide access panels and louvers as required for service.
- F. Refrigeration systems shall be complete with items as specified or as required to provide a first class system. Should any dispute arise as to the quality of equipment or workmanship, the decision shall rest with the Consultant.
- G. Hermetic or scroll compressors shall be mounted on anti-noise, anti-vibration blocks, and be factory mounted in welded angle iron frame and housing with support rails, metal curbs, timed defrost, factory installed control panel, pilot light, NEMA rated disconnects and starter, etc. Compressors to be factory pre-connected for final water and electrical connections. Verify that proper ventilation of compressors is obtained.
- H. Provide coil and/or compressor condensate drain lines as required and shown on the drawings. Provide drain lines terminating with trap over floor drain where shown. Drain lines to be neatly insulated with material similar to Armaflex. Any drain line run through a freezer compartment shall also have a heater coil neatly wrapped over the line, prewired and shall operate continuously. No drain piping shall interfere with shelving within the compartment nor exit through the front of a compartment. All piping shall be concealed where possible.
- I. Coils shall have timed defrost and immersion type thermostat and be connected to compressors by equipment supplier using type "L" copper tubing soldered using industry acceptable refrigerant. Refrigeration lines shall be insulated in same manner and materials as coil and drain lines and shall be concealed where possible.
- J. Provide refrigeration system with expansion valves, pressure controls, strainers, solenoid valves, liquid dryers, adjustable room thermostats, hangers, king and queen valves, heat exchangers, oil separators, pump-down solenoid, low ambient controls, crankcase heater, outdoor shroud, shut-off valves, sleeves, sight glass with moisture indicator and all other items necessary for a complete system.
- K. All electrical components within each compartment shall be pre-wired by supplier to junction box on exterior top of compartment. Make final connections and inter-wire to lights and from walk-in coils to compressor for timed defrost in conduit as required.

- L. After final connections, evacuate, pressure test, charge, start up and operate system for a period of three (3) days and make all necessary adjustment of controls as required. Operate coolers at 35 degrees and freezers at -5 degrees unless noted on plans. Provide manufacturers five-year compressor warranties and one-year free service available within 12 hour notification.

2.28 WATER INLETS:

- A. Water inlet locations shall be located above positive water level to prevent syphoning of liquid into the water system.
- B. Wherever conditions require water inlet placed below water level, a suitable pressure type syphon breaker or double check valve shall be placed on fixture to form a part of same to prevent back syphoning.
- C. Exposed syphon breakers shall be chrome plated units with chrome plated piping and slip flanges where exposed.

2.29 MECHANICAL/ELECTRICAL MATERIALS REQUIRED IN FOOD SERVICE CONTRACT:

- A. The equipment supplier shall include materials properly labelled and packaged as follows:
- B. PLUMBING APPURTENANCES:
 - 1. Check requirements for gas, water, steam, etc. on job before ordering equipment. Information shown on drawings or specifications does not relieve contractor of this responsibility.
 - 2. Faucets, pre-rinse units, lever wastes, vacuum breakers, to be as manufactured as described in the item specifications.
 - 3. Except as otherwise specified, provide each sink compartment with deck type or backsplash type faucet with minimum 12" swing spout soft flow. Where multiple sink compartments are provided, faucets may be located between compartments.
 - 4. C.P. brass overflow fittings shall be 1-1/2" tubing fully connected to sinks at factory with lever handle quick opening wastes with tailpieces on each sink compartment.
 - 5. Provide all solenoids, C.P. atmospheric or pressure type vacuum breakers with C.P. stems above counter tops, shock absorbers, check valves, mixing valves, gas regulators, etc. required by code or for proper operation of equipment with mounting brackets as required. Valves shall be installed where required, accessible and convenient to the operator.
 - 6. Provide swivel gas hoses assemblies 36" or of proper length as required with quick disconnect, ball valve, caster floor locks and 3000 pound coiled restraining device, and wall brackets.
 - 7. All steam equipment shall have valves provided with heat resistant handles, traps, gauges, etc. as required for proper operation
- C. ELECTRICAL APPURTENANCES:
 - 1. Check voltage on job before ordering equipment. Information shown on drawings or specifications does not relieve contractors of this responsibility.
 - 2. Except where noted under item specifications, current characteristics for motors 3/4 HP or less, solenoid valves and lighting shall be 120 volt, single phase, 60 cycle, A.C. Unless otherwise noted under item specifications, motors 3/4 HP and over shall be wound for 208/240 volts, three phase, 60 cycle, A.C.

3. Provide 120 volt control circuit on all equipment that operates on voltages on or over 208 volt. All equipment requiring 120 volt control circuits (120/480 volt, 120/208 volt, etc.) shall have transformers pre-wired on equipment.
4. Cords and plugs and receptacles for equipment shall be three or four wire all rubber coiled retractable style cord with ground as required and match receptacles provided and as best suited for the equipment. Units shall be mounted in NEMA type enclosures as per code with s.s. faceplates and boxes where receptacles are exposed.
5. Thermostats, unless otherwise noted on plans or in the item specifications, shall be provided at all equipment (bain-marie, urns, dish machines, hot food table, warming cabinets, etc.) with thermostatic control.
6. Heating elements to be of voltage and phase as specified or as required to suit job.
7. Controls, thermostats, switches, contactors, low water cut off, light fixtures and bulbs, etc., necessary for the installation and proper operation of equipment shall be furnished as required along with all starters and/or motor control switches for the proper function of the equipment specified. Controls mounted on vertical surfaces shall be recessed.
8. Controls that are an integral part of equipment shall be factory installed. Controls which are to be separately mounted shall be shipped loose for field installation. Coordinate all field installation so as to not interfere with access and/or operation.
9. Provide properly sized magnetic starters line voltage type with thermal overload relays and reset for normal operation by automatic control or pushbutton station for 208/240 volt control. Enclosures shall be general purpose NEMA type 1, A.C. voltage, unless located outdoors which will require a waterproof enclosure. Remote control motors shall have magnetic starters.
10. Disconnect switches shall be type non-fusible, single throw, heavy duty industrial, quick make, quick break. Circuit breakers may be used in lieu of above disconnects as per code.
11. Provide equipment with required internal wiring between elements, switches, motors, receptacles, starters, etc. complete to a junction box. Disconnect, starter, etc. as required and are to be "left ready" for final connections. All control circuits shall be 120 volt to ground.

PART 3 - GENERAL SPECIFICATIONS - EXECUTION

3.01 INSTALLATION AND MATERIALS:

- A. All work required under this section shall be installed by the proper trades having jurisdiction in this area concurrent with job progress, Construction manager scope of work and related field conditions. Such installation shall be under the direction of a competent supervisor. A site inspection is recommended prior to bidding if applicable.
- A. Provide for the conveyance, uncrating, erection, assembling, setting in place, trim, cutting of holes and ferrules in equipment for piping, drains, electrical outlets, etc.
- B. Coordinate installation with all trades, repairing of any damage done to equipment during installation, removal of debris created by installation, startup, testing, and cleaning of all equipment (new, existing, or relocated).
- D. Where necessary to move equipment to make final connections, coordinate and assist all in moving equipment and be on the job to carefully level and adjust equipment as the connections are being made. During installation, coordinate with all trades on connection details and be responsible for meeting the individual equipment manufacturer's connection requirements. Report any infractions of installation procedure in written form.
- E. The fit of all equipment as it joins all walls, floors, and corners shall be tight (within 1/4") to adjacent walls, seal all equipment with NSF approved clear sealing compound and/or s.s. trim

molding of proper size with concealed fasteners. Inspect the site and advise in writing and/or on shop drawings all necessary building requirements door sizes, etc. to receive the equipment and assure accuracy of fit and installation.

- F. All cabinet bases and pieces of equipment which are to be set on bases or machine platforms shall be set into a sealing compound of color to match the tile mortar. Enclosures, backsplashes, and turn-backs to wall shall be pressed into a ribbon of the same material with the excess wiped out to a radius fillet. Where necessary, and to eliminate shifting and the subsequent breaking of this seal, item shall be anchored to floor and wall with suitable masonry anchors. All equipment with utility connections (island style sinks, dish tables, etc.) shall also be anchored to floor with s.s. flange type feet.
- G. All equipment and materials shall be new, of prime quality, full gauge thickness of compositions indicated by names or abbreviations stated in itemized specifications.
- H. Equipment batteries of one manufacturer are to be pre-fitted at the factory and provide photographic proof of such work.
- I. If equipment is noted as relocated or removed during the construction period, said equipment shall be disconnected and be re-connected as directed in the Construction Manager scope of work and removed and stored unless noted in the item specifications. Coordinate and supervise this work and label equipment for reuse. Reinstall and clean equipment as per the plans and specifications. Existing equipment not scheduled for reuse shall be removed as directed in the Construction Manager scope of work.

3.02 LIMIT OF OTHER SUBCONTRACTORS/TRADES RESPONSIBILITY:

A. Plumbing:

- 1. Provide rough-ins and piping with stop valves, elbows, nipples, couplers, traps, waste vents, gas regulators, for water, steam, gas, etc. and make final connections to the equipment as directed in the Construction Manager scope of work.
- 2. Install equipment accessories (faucets, lever wastes, solenoids, valves, gas hoses, nipples, etc.) as directed in the Construction Manager scope of work.
- 3. Provide water heater and janitors sink unless otherwise indicated on the plans as directed in the Construction Manager scope of work.
- 4. Disconnect and reconnect relocated equipment if applicable as directed in the Construction Manager scope of work.

B. Electrical:

- 1. Provide rough-ins, controls, panels, switches, wall receptacles to match equipment cords and plugs, starters, junction boxes, canopy light and fan switches, conduit, wiring, wall outlets, disconnects, etc. and make final connections to the equipment as directed in the Construction Manager scope of work.
- 2. Install equipment accessories (cords, wiring harness, switches, etc.) in conduit as required by code as directed in the Construction Manager scope of work.
- 3. Disconnect and reconnect relocated equipment as directed in the Construction Manager scope of work.

C. General:

1. All concrete platforms, bases, etc. will be provided as directed in the Construction Manager scope of work. Grouting of drip pans and/or floor troughs to be installed as directed in the Construction Manager scope of work.
2. All required holes and recesses for piping and ducts will be coordinated with all trades and as directed in the Construction Manager scope of work. Provide location, size, etc. This information is to be provided in adequate time to be incorporated in the work.
3. Unless stated in the item specifications, provide all floor recesses, insulated sub floors, tile floors and vapor barriers for walk-ins as noted in the plans and as directed in the Construction Manager scope of work.
4. If applicable, remove relocated equipment from kitchen and store in adjacent area during Kitchen construction period. Coordinate removal, inspection, storage, labeling, etc. of equipment. Reinstall relocated equipment as per plan after construction is completed as directed in the Construction Manager scope of work.
5. Provide fire rated walls in kitchen for cooking equipment exhaust hoods and non-combustible materials within 18" of top of hood or as required by fire codes as directed in the Construction Manager scope of work.

3.03 TESTING:

- A. After installation and hook, inspect, start up, clean, adjust and test all equipment under operating conditions for 48 hours prior to acceptance by Owner. If inspection or test shows defects, such defects shall be corrected and inspection and test repeated. Certify in writing that all equipment is performing in full compliance with the plans and specifications.

3.04 DEMONSTRATION:

- A. After utility connections to the equipment is completed, schedule and conduct the inspection and start up and final test of equipment prior to final inspection. Schedule the demonstration with the Owner and perform the demonstration in the presence of the Owner and/or their authorized representative with a minimum of seven days notification to owner.
- B. Before final inspection, remove any and all protective covering from his work and give all parts of all equipment a thorough cleaning and servicing, leaving items free from defects and remove trash from premises.
- C. Provide required competent personnel for two eight-hour periods as instructors to operating and maintenance personnel on the safe and proper operation and maintenance of all equipment. Provide additional instructions up to eight additional hours during the one-year guarantee period as requested by the Owner.
- D. Present all maintenance manuals and as built drawings as previously specified or requested by Consultant.

3.05 FINAL INSPECTION AND PUNCH LIST:

- A. After installation is completed and tested, notify the Consultant who will review all equipment and submit a repair or punch list of all items that are not in compliance with the documents. All items shall be completed immediately and not to exceed 14 days unless written notice is submitted and approved.

3.06 SCHEDULE OF EQUIPMENT:

- A. The following specifications refer to items of food service equipment on the drawings which shall form a part of these specifications and are binding as written herein, and will indicate the required quantity, size, etc. of each item.

Item Specifications:

Item #101 – Walk-in Cooler & Freezer - Qty. of 1

Base Manufacturer: Kolpak Co.

Base Model: R-Series

Alternate Manufacturer: Leer Co.

Alternate Manufacturer: Bally Co.

Alternate Manufacturer: American Panel Co.

Alternate Manufacturer: Imperial/Brown Co.

Alternate Manufacturer: Tafco Co.

Minimum specifications:

1. NSF walk-in sized approximately 7'-9" by 16'-4.5" and shape as shown on plan by 8'-6" high with aluminum interior and stainless steel exposed exterior finish, aluminum interior ceilings, door heaters, gaskets, pressure relief port, etc. for all compartments. Provide digital thermometer with audio / visual alarm system with dry contactors to connect to building management system, door heaters, gaskets, door threshold, pressure relief port, etc. for all compartments.
2. Pre-fabricated floor shall be .080 textured aluminum with .75" exterior grade plywood backing throughout and interior ramps. Floor panels shall be 4" thick foamed-in-place rigid polyurethane with an R-Value minimum of 32 and shall utilize cam-locks for assembly. Metal floor surface and plywood underlayment shall be foamed-in-place (not over-laid).
3. Provide standard 34" wide flush mount doors with stainless steel front, 24" high aluminum tread-plate interior kick-plate, two cam lift hinges, chrome plated hardware, self-closing hinged vinyl door curtain, and have same 4" thick foamed in place UL-25 flame spread rated urethane insulation as walls and ceiling.
4. Furnish one LED light mounted over the door and extra 48" LED lights inter-wired to switch per plan. All lighting shall have a 40 lumens per watt efficacy or more including ballast loss.
5. Joints between walk-in and building walls and ceiling shall be closed with filler strips of same appearance as exterior of box with service access panels as required.
6. Provide one UL listed 208 Volt 3 Phase system for the cooler and one 208 Volt 3 Phase system for the freezer. Provide Copeland compressors piped to BTU matched Bohn low profile end mount coils. Freezer shall have 208 Volt 1 Phase timed electric defrost coil. Cooler shall have 120 Volt air defrost coil. Both coils shall be furnished with electronically commutated motors, remote mounted (shipped loose) weather proof time clock for timed defrost, thermostat, solenoid, "P"-trap and expansion valves mounted and wired.
7. The air-cooled compressors shall be factory assembled and mounted on heavy duty steel base and be placed on roof with outdoor package in aluminum housing with hinged shroud, head pressure control with flood back, crankcase heater, sight glass, frame mounted dual pressure control, oversize condenser, drier, suction line filter, suction vibration eliminator, oversize receiver with total pump down capacity and king and queen service valves. Provide a pre-wired NEMA-3 control panel with industrial grade fused disconnect, terminal block, magnetic starters, circuit breakers and contactors, defrost timer and pump down switch.
8. Provide approximately 30'-0" of field piped and pressure tested insulated refrigeration lines per compartment to connect compressors to coils. Provide refrigeration with piping, controls, drain lines and heat tape, etc.
9. Provide a 5 Year warranty on compressors and 1 Year free service plan as per G.S.
10. Final connections, structural support, etc. are by Trades.

Item #102 – Utility Cart – Qty. of 2

Base Manufacturer: Cambro Co.

Base Model: BC2304S110

Alternate Manufacturer: None

Minimum specifications:

1. Unit shall be constructed of single molded, double-wall, high density polyethylene and thick injected polyurethane.
2. Heavy duty swivel casters.

Item #102A – Utility Cart – Qty. of 2

Base Manufacturer: Cambro Co.

Base Model: BC2354S110

Alternate Manufacturer: None

Minimum specifications:

1. Unit shall be constructed of single molded, double-wall, high density polyethylene and thick injected polyurethane.
2. Heavy duty swivel casters.

Item #103 - Shelving - Qty. of 17

Base Manufacturer: Inter-Metro Co.

Base Model: MQ24-G

Alternate Manufacturer: None

Minimum specifications:

1. Provide Metro-Max polymer units size and shape as per plan with four posts and shelves per section.
2. Units shall have 74" posts.
3. Post connectors, traverses and four vented shelf plates.
4. Two swivel and two locking casters.

Item #104 – Milk Crate Dolly – Qty. of 2

Base Manufacturer: Cambro Co.

Base Model: CD1313

Alternate Manufacturer: None

Minimum specifications:

1. Unit shall be constructed of single molded, double-wall, high density polyethylene and thick injected polyurethane.
2. Heavy duty swivel casters.

Item #105 - Pan Rack - Qty. of 2

Base Manufacturer: Crescor Co.

Base Model: 207-1811-C

Alternate Manufacturer: None

Minimum specifications:

1. Provide fully welded universal angle 64" high aluminum rack.
2. Two 5" heavy duty swivel casters and two 5" heavy duty locking swivel casters.

Item #106 - Dunnage Rack - Qty. of 2

Base Manufacturer: Inter-metro Co.

Base Model: HP-PD

Alternate Manufacturer: Eagle Co.

Minimum specifications:

1. Furnish and install polymer unit size and shape as per plan.
2. Connector strips.

Item #107 – Portable Table - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJRN30-SE

Alternate Manufacturer: Approved Manufacturer as listed in Section 2.03 of the General Specifications.

Minimum specifications:

1. Furnish and install 14 Gauge 304 stainless steel table as per G.S. size and shape as per plan by 34" high.
2. Stainless steel legs and gussets.
3. Flat sound deadened top.
4. One 20" by 20" by 5" deep roller bearing drawer assembly with plastic or stainless-steel insert.
5. 16 Gauge stainless steel under shelf.
6. 5" heavy duty locking casters.

Item #201 – Trash Bin – By Owner

Item #202 – Work Table - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJ30-SE-BS

Alternate Manufacturer: Approved Manufacturer as listed in Section 2.03 of the General Specifications

Minimum specifications:

1. Provide 14 Gauge 304 stainless steel table size and shape as per plan by 34" high.
2. Stainless steel legs, gussets, and adjustable bullet feet.
3. Sound deadened stainless steel top with 6" backsplash.
4. 16 Gauge stainless steel under shelf.
4. One 20" by 20" by 5" deep roller bearing drawer assembly with plastic or stainless-steel insert.
6. 10" deep stainless steel over shelf mounted 24" above table surface as show on plan.

Item #203 – Hot Food Cabinet - Qty. of 2

Base Manufacturer: Cres-Cor Co.

Base Model: H-137-SUA-12D

Alternate Manufacturer: None

Minimum specifications:

1. Provide stainless steel insulated cabinet that operates on 120 Volt with cord and plug.
2. Universal angles sized for 12" by 20" and 18" by 26" pans.
3. 5" heavy duty locking casters.
4. Perimeter bumpers.
5. Field reversible Dutch doors.
6. Top mounted controls.
7. Transport latch and wire transport angles.

Item #204 – Cold Food Cabinet - Qty. of 1

Base Manufacturer: Cres-Cor Co.

Base Model: R-171-SUA-10SD

Alternate Manufacturer: None

Minimum specifications:

1. Provide stainless steel insulated cabinet that operates on 120 Volt with cord and plug.
2. Universal angles sized for 12" by 20" and 18" by 26" pans.
3. 5" heavy duty locking casters.
4. Perimeter bumpers.
5. Left hinged door.
6. Top mounted controls and bottom mount compressor.
7. Transport latch and wire transport angles.
8. Provide a 5 Year warranty on compressor with and 1 Year free service plan as per G.S.

Item #301 - Convection Oven - Qty. of 1

Base Manufacturer: Blodgett Co.

Base Model: ZEPHAIRE-200-E

Alternate Manufacturer: None

Minimum specifications:

1. Double deck standard depth.
2. Electric unit that operates on 208 Volt 3 Phase with direct connections.
3. Stainless steel front and sides.
4. Door windows.
5. 5" heavy duty locking casters.
7. Two speed motors with solid state control panel with standard controls.
8. Unit to be provided with a Hoodini ventless hood. Hood shall meet UL or KNLZ listing for ventless operation.

Item #301A – Ventless Hood – Included in Item #301.

Item #302 - Refrigerator - Qty. of 1

Base Manufacturer: Traulsen Co.

Base Model: G10011

Alternate Manufacturer: None

Minimum specifications:

1. Unit to operate on 120 Volt with cord and plug and have top mount compressor.
2. Stainless steel exterior front and left door hinging.
3. Digital thermometer.
4. Four coated shelves.
5. 5" heavy duty locking casters.
6. Provide a 5 Year warranty on compressor and 1 Year free service plan as per G.S.

Item #401 – Hot Food Table – Qty. of 1

Base Manufacturer: Duke Co.

Base Model: TEHF-60SS

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Provide 34" high unit size and shape per plan that operates on 120 Volt with cord and plug.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. Wet or dry hot food wells with drains, drain manifold with individual and master valves. Drain valves to be easily accessible from the employee side of the counter.
4. Open rear with plastic laminate front and end panels in color as selected by the Architect.
5. One 12" solid folding inverted "V" style stainless steel tray slide and one 8" stainless steel solid folding work shelf mounted on rear.
6. Set of 5" heavy duty locking casters.
7. Furnish and install BSI Co. or Premier Brass Co. Model #ZG9930 sneeze guard with brushed aluminum uprights and top mounted hardware, slim/stealth heat lamp, light, glass top, ends, and adjustable front. Unit shall meet current NSF standards. Center posts not acceptable.
8. Sneeze guard assembly and hot food table to be inter-wired to a common point to provide one electrical connection for entire unit and be supplied with a cord and plug.

Item #402 – Utility Counter – Qty. of 1

Base Manufacturer: Duke Co.

Base Model: TST-32SS

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Provide 34" high unit as per plan.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. open rear with plastic laminate front and end panels in color as selected by the Architect.
4. Two 12" solid folding inverted "V" style stainless steel tray slides.

5. Set of 5" heavy duty locking casters.

Item #403 – Cold Food Table – Qty. of 1

Base Manufacturer: Duke Co.

Base Model: TCM-60SS-N7

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Provide 34" high unit as per plan with NSF-7 drop-in self-contained refrigerated cold pan with drain and shut off valve, on/off switch, and pan adapter bars. Unit shall operate on 120 Volt with cord and plug. Drain shut off valve to be easily accessible from the employee side of the counter.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. Plastic laminate front and end panels in color as selected by the Architect.
4. Two 12" solid folding inverted "V" style stainless steel tray slides.
5. Set of 5" heavy duty locking casters.
6. Furnish and install BSI Co. or Premier Brass Co. Model #ZG9930-2 sneeze guard with brushed aluminum uprights and top mounted hardware, light, glass top, ends, and adjustable front. Unit shall meet current NSF standards. Center posts not acceptable.
7. Sneeze guard assembly and cold food table to be inter-wired to a common point to provide one electrical connection for entire unit and be supplied with a cord and plug.

Item #404 – Spare Number

Item #405 - Milk Cooler - Qty. of 2

Base Manufacturer: Beverage Air Co.

Base Model: SMF49-1-S

Alternate Manufacturer: None

Minimum specifications:

1. Self-contained forced air unit that operates on 120 Volt with cord and plug.
2. Dial thermometer.
3. Lid locking device.
4. Stainless steel exterior.
5. Heavy duty locking casters.

Item #406 – Cashier Counter – Qty. of 1

Base Manufacturer: Duke Co.

Base Model: TCS-30SS

Alternate Manufacturer: Randell Co.

Alternate Manufacturer: LTI Co.

Minimum specifications:

1. Counter to be 34" high, size and shape as per plan.
2. Stainless steel top, latching assembly and stainless-steel undershelf.
3. Plastic laminate front and end panels in color as selected by the Architect.
4. Two 12" solid folding inverted "V" style stainless steel tray slides.
5. Provide enclosed base with open end, one locking cash drawer and stainless-steel interior under shelf.
6. 5" heavy duty locking casters.

Item #407 – Cash Registers / POS – By Owner.

Item #408 – Low Profile Air Curtain – Qty. of 1

Base Manufacturer: True Co.

Base Model: THAC-48-S

Alternate Manufacturer: None

Minimum specifications:

1. Unit to operate on 120 Volt with cord and plug.
2. Plastic laminate exterior in color as selected by the Architect.
3. Top mounted shielded lighting, shelf lighting.
4. Black base, black trim, stainless steel display deck, black interior back panel, and mirrored stainless steel ends.
5. Pull down energy saving night shade and lockable roll down security curtain.
6. Digital thermometer.
7. Three level tiered stainless-steel floor.
8. Electronic temperature sensors.
9. Self-contained refrigeration system with condensate evaporator, and on/off switch.

Item #501 – Spare Number

Item #502 - Hand Sink - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: HSA-10-FA-P

Alternate Manufacturer: Advance Tabco Co.

Minimum specifications:

1. 9.75" by 13.5" by 6.75" deep stainless-steel sink with fully welded side splashes.
2. Standard faucet and single foot pedal and faucet assembly.
3. Soap and towel dispenser shall be provided and installed by the Owner.

Item #503 - Pot Sink - Qty. of 1

Base Manufacturer: Eagle Metalmasters Co.

Base Model: YJLAN2660-3-18

Alternate Manufacturer: Advance Tabco Co.

Minimum specifications:

1. 14 Gauge 304 unit constructed per G.S. size and shape as per plan by 34" high.
2. 9" backsplash, 21" by 26.5" by 14" deep sinks.
3. Integral drain boards.
4. One T&S Co. 5F-8WLS12 faucet, and one 5PR-8W12-C + B-TEE-RGD spray hose unit and faucet.
5. T&S Co. B-3990-01-3X modular waste drains with connected overflows.
6. Stainless steel legs, gussets, and adjustable bullet feet.
7. Area below tables is to be furnished with 16 Gauge removable stainless steel under shelving where possible.
8. Provide 14" coated wire wall shelves and brackets mounted 24" above sink as shown on plans.

END OF SECTION 11 4000 – FOOD SERVICE EQUIPMENT

H Barbara Booker Kitchen

Food Service Equipment Purchase and Install Drawings

1. PEG SHALL VERIFY KOLORIN REQUIREMENTS FOR ALL EQUIPMENT. OWNERS SUPPLIED EQUIPMENT, ETC.
2. TRADES TO REMOVE EXISTING ROUGHINS WHEN APPLICABLE.
3. TRADES SHALL DISCONNECT, REMOVE, STONE & RECONNECT ANY EXISTING EQUIPMENT AS REQUIRED FOR CONSTRUCTION PURPOSES.
4. EQUIPMENT NOT BEING RE-USED TO BE DISCONNECTED BY TRADES AND STORED OR DISCARDED BY THE PEG AS DIRECTED BY OWNER.
5. EQUIPMENT DESIGNATED AS RELOCATED SHALL BE DISCONNECTED BY THE TRADES AND RELOCATED BY THE PEG AS PER PLANS AND SPECIFICATIONS.

DATE CODE	PROJECT PHASE	BY
01/01/21 01/01/21 01/01/21	SYSTEM DESIGN	CM
01/01/21 01/01/21 01/01/21	CONSTRUCTION DOCUMENTS	CM
01/01/21 01/01/21 01/01/21	RUDA	CM

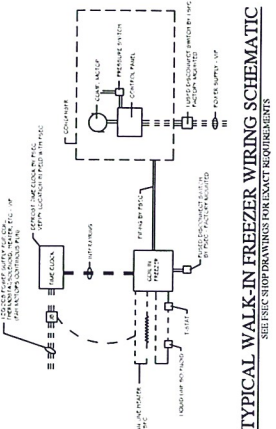
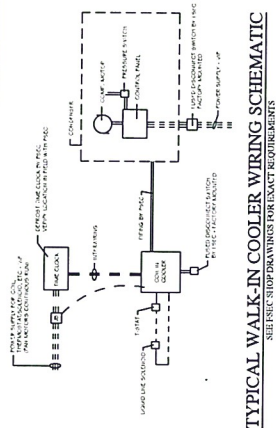
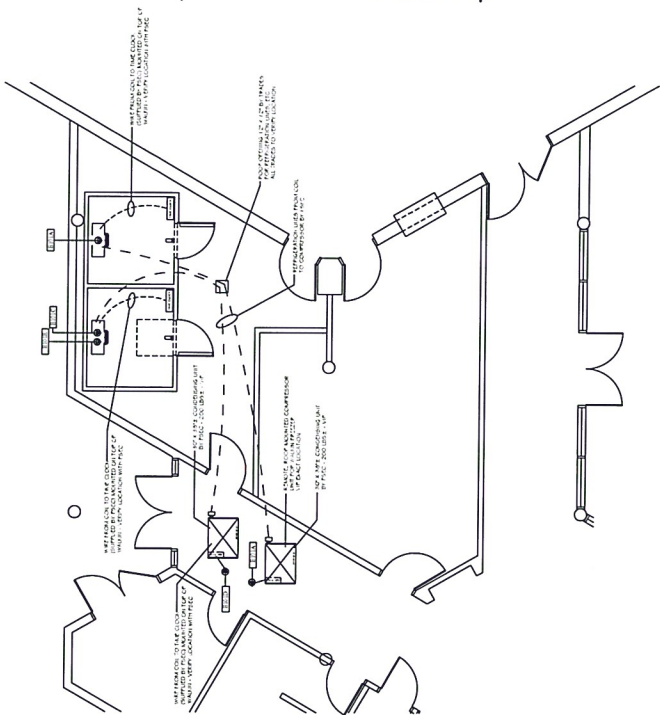
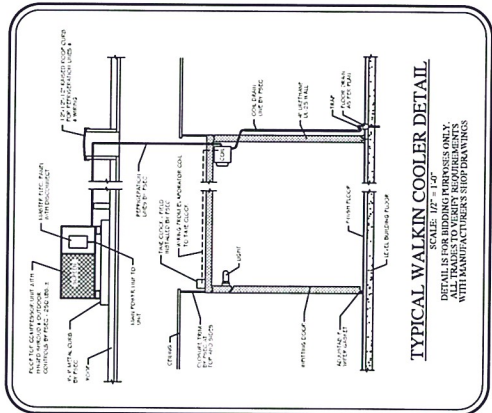
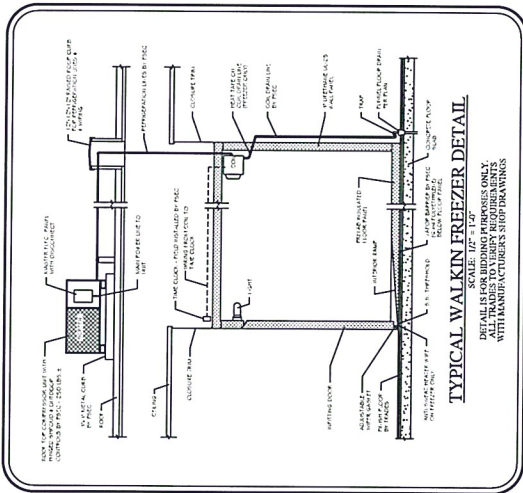
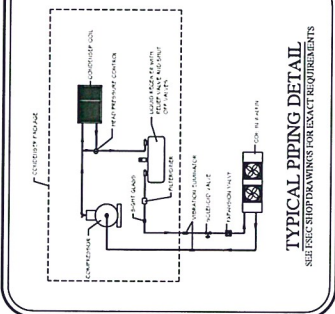
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SHEET NUMBER:

SHEET NUMBER:
FSE-1

EQUIPMENT SCHEDULE

Item	Qty	DESCRIPTION	CU (B)	HW (B)	INSULATED (B)	REF (B)	WASH (B)	DIS (B)	GAS (B)	WATER (B)	Volts	Ph.	Amperage	Equipment Remarks
101	1	WASH-SINK/COMBINATION									120	1	0749	INSULATED FLOOR, SEE REFINISH PLAN
102	1	WASH-SINK/COMBINATION									120	1	530	
103	1	WASH-SINK/COMBINATION									120	1	530	ROOF CURBS BY EIC
104	1	WASH-SINK/COMBINATION									120	1	530	ROOF CURBS BY EIC
105	1	WASH-SINK/COMBINATION									120	1	530	ROOF CURBS BY EIC
106	2	UTILITY CART									120	1	530	
107	1	UTILITY CART									120	1	530	
108	1	UTILITY CART									120	1	530	
109	1	UTILITY CART									120	1	530	
110	1	UTILITY CART									120	1	530	
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