SECTION 11400 - FOODSERVICE EQUIPMENT

PART 1 - GENERAL

1.01 SECTION INCLUDES

- **A. Foodservice Equipment:** Standard manufactured and custom fabricated items.
- **B.** Inclusive of Job: The work under this section consists of providing all labor, material, products, and equipment that are necessary and required for the complete installation of the food service equipment, as indicated on drawings, and as herein specified.

1.02 RELATED SECTIONS

- **A. Documents:** All work described in these documents must be carefully coordinated with the work of those other trades directed by the terms and conditions of the SAGINAW PUBLIC SCHOOLS documents. The drawings and specifications of SAGINAW PUBLIC SCHOOLS shall direct the Foodservice Equipment Contractor with respect to the project schedule, contract issues, coordination and payment requirements. These documents can be obtained by contacting SAGINAW PUBLIC SCHOOLS.
- **B.** Contract: All work by the Foodservice Equipment Contractor shall be performed under the contract and payment terms and conditions as defined in the American Institute of Architects document: A101 Standard Form of Agreement Between SAGINAW PUBLIC SCHOOLS and Contractor, 1987 edition, modified by substituting the words "SAGINAW PUBLIC SCHOOLS" in place of the word "Architect" and amended to include all of the work as outlined in the project documents, for primary requirements, and Architect, for building and engineering reference information. Execute this contract agreement after notice of award of contract, prior to start of work, but not later than 15 days after Notice to Proceed.

1.03 COORDINATION WITH OTHER TRADES

- A. The Foodservice Equipment Contractor shall perform the following:
 - 1. Furnish loose to the Mechanical Contractor, gas hoses, pressure regulators, vacuum breakers, water filters, faucets, waste valves, overflows, swirl sprays, solenoid valves and floor troughs where specified.
- **B.** The Mechanical Contractor shall perform the following:
 - 1. Make all final utility connections between the rough-in point and the equipment.
 - 2. Provide all final interconnections including faucets, sink drains, sink waste valves, overflow connections, hot food wells and floor troughs.
 - 3. Provide traps, connecting pipe, valves, stops, floor drains, floor sinks, grease traps, and all other hardware, supplies and parts necessary for the performance of work under this contract, unless specified otherwise in the item specification. All exposed plumbing above the counter and in direct line of site shall be stainless steel or chrome plated.
 - 4. Properly install all drain assemblies and shut-off valves for sinks, hot food wells, etc. All drain assemblies must be installed per all local health department prevailing codes.

- 5. All work must meet all applicable state and local codes and conditions.
- Provide and obtain all permits, licenses and approvals required. Permit fees will be paid by the Mechanical Contractor.

C. The Electrical Contractor shall perform the following:

- 1. Make all final connections between the rough-in point and the equipment.
- 2. Provide all final interconnections including cold pans, food wells, walk-ins, ventilation systems, serving counters, etc.
- 3. Furnish all safety cut-outs, line disconnect devices, shunt trip breakers, power panels, power cords, receptacles, outlets, conduit, wire and other electrical controls, fittings, and connections necessary for food service equipment, with the exception of controls, disconnects and fittings integral to the food service equipment, which shall be furnished by the Food service Equipment Contractor.
- 4. All work must meet all applicable state and local codes and conditions.
- Provide and obtain all permits, licenses and approvals required. Permit fees will be paid by the Electrical Contractor.

D. The Other Contractors shall perform the following:

- The Other Trades shall provide necessary flues and/or vents of size and capacity required to operate fixtures. Roof openings, flashing and sealing for food service ventilation shall be provided by the Other Trades.
- 2. The Other Trades shall provide necessary sleeves or chases of size and capacity required for refrigeration lines and wiring harnesses. Roof openings, flashing and sealing for food service refrigeration lines shall be provided by the Other Trades.

1.04 DEFINITIONS AND ABBREVIATIONS

- **A. General Explanation:** Certain terms and abbreviations used in Contract Documents are defined generally in this article. Definitions and explanations of this section are not necessarily either complete or exclusive, but are general for the work to the extent not stated more explicitly in another provision of Contract Documents.
- **B. F.E.C.:** Food service Equipment Contractor. "F.E.C." abbreviates "Food service Equipment Contractor."
- **C. C.M.:** Construction Manager. "C.M." abbreviates "Construction Manager." As read, work by the Construction Manager refers to work by the Construction Manager and their subcontractors.
- **D. B.I.B.:** Base Item Bid. "B.I.B." abbreviates "Base Item Bid." The Base Item Bid is material, product, or equipment identified in the specifications as the standard to be provided. In the Item Specifications for foodservice equipment, each item identifies a single manufacturer as the Base Item Bid. The Base Item Bid is to be distinguished from Contractor's Options, Alternates, and Substitutions.
- **E.** Alternate: A different material, product, equipment, specialty, system, or other part of the work than that which is the Base Item Bid, and for which the SAGINAW PUBLIC SCHOOLS desires a

- comparative quotation. An alternate carries no presumption of being equal to the Base Item Bid. Rather, it represents a different product, system, specialty or approach under consideration for use in the work. Alternates are governed by the terms and conditions of Part 1.06 of this Section.
- **F. Furnish:** Except as otherwise defined in greater detail, term "furnish" shall mean and intend supply and delivery to project site, unloading, unpacking, assembly, installation, calibration and operator training as appropriate in each instance.
- **G. Install:** Except as otherwise defined in greater detail, term "install" shall mean and intend that the contractor shall perform all work as outlined in the Contract Documents, shall assemble all specified equipment of the contract in one piece in the required locations of the building, and shall make necessary connections as specified within these Contract Document Specifications.
- **H. Provide:** Except as otherwise defined in greater detail, term "provide" shall mean and intend furnish and install, tested and clean, complete and ready for intended use, as appropriate in each instance.
- I. Indicated: The term "indicated" is a cross-reference to graphics, notes or schedules on drawings, to other paragraphs, or schedules in the specifications, and to similar means of recording requirements in Contract Documents. Use of terms such as "shown," "noted," "scheduled," and "specified" used in lieu of "indicated," is intended only to help reader locate cross-reference and not limitation of location is intended.
- J. Directed, Requested, etc.: Where not otherwise explained, terms such as "directed," "requested," "selected," "approved," "required," "accepted," and "permitted" mean "directed by SAGINAW PUBLIC SCHOOLS," and the like. However, no such implied meaning shall extend responsibility of SAGINAW PUBLIC SCHOOLS into Contractor's area of supervision.
- **K. Project Site, Job Site:** The space available to Contractor for performance of the Work, either exclusively or in conjunction with others performing other work as part of the Project.
- **L. Or:** Used in inclusive sense to indicate alternatives of any item or any combination or items in a list unless otherwise indicated.
- **M. Include:** The word "include" and its forms is not meant to limit provisions to a list nor to exclude other, unnamed items from a list which it precedes. The phrase, "but not limited to," may be assumed to follow uses of the word include and including.
- **N. Installer:** The entity (person or firm) engaged by Contractor or its subcontractor for performance of a particular unit of work at project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (Installers) be expert in operations they are engaged to perform.
- **O. RPZ:** Abbreviates reduced pressure zone backflow preventer.
- **P.** Cross Connection: Means a connection or arrangement of piping or appurtenances through which a backflow could occur. Cross connections may be made "directly" or "indirectly".
- **Q. Backflow:** Means water of questionable quality, wastes, or other contaminants entering a public water supply system due to a reversal of flow. Backflow can occur by either backpressure or back siphonage conditions.
- **R. Backpressure:** Backpressure conditions occur when the downstream pressure exceeds the upstream pressure.
- S. Back siphonage: Back siphonage is caused by a vacuum or partial vacuum in a water supply system.

1.05 RESPONSIBILITY AND INSURANCE

A. Insurance requirements are as defined in the bid documents of the Architect AND Construction Manager. Do not commence Contract work until these minimum insurance requirements are active and in force. Establishment of these minimum requirements shall not be construed to mean same are adequate for the type and method of work to be performed and/or that the contractor can rely on the type and limit established for his operations. The Food Service Equipment Contractor is completely responsible for broadening the scope and limits as necessary to cover the maximum potential exposure and risk for all parties involved in the project.

1.06 SPECIFIED MANUFACTURERS & ALTERNATES

- **A. Specified Products & Materials:** Certain, definite brands of materials, products, and equipment are specified as the standard of quality. These brands constitute the base item bid (abbreviated hereinafter as B.I.B.) Where one or more additional brands are named as B.I.B., the bid may be based on any one of the named brands.
- **B. Voluntary Alternates:** Bidders are encouraged to suggest and quote other brands of the same quality that they may desire to substitute. It is not the intention to discriminate against other brands or manufacturers whose materials, products or equipment is equal or better to what has been specified. Rather, the naming of a specific brand is intended to establish a definite standard. These shall be submitted as Voluntary Alternates.
 - 1. Voluntary Alternates must be proposed independently of the base bid. and mandatory alternate bid.
 - 2. The SAGINAW PUBLIC SCHOOLS reserves the right to accept or reject any alternate bid. Bids must be based on B.I.B. items as specified, not per mandatory or voluntary alternates.
- **C. Substitutions:** Requests for substitutions will be considered before award of Contract when extensive revisions to contract documents are not required and changes are in keeping with general intent of Contract Documents, when fully documented and properly submitted, when any conditions stated elsewhere in the bid documents are satisfied, and when one or more of the following conditions are satisfied, all as judged by SAGINAW PUBLIC SCHOOLS
 - 1. Where the required product, material, or method cannot be provided within Contract Time, but not as a result of F.E.C.'s failure to pursue the work promptly or coordinate various activities properly;
 - 2. Where required product, material, or method cannot be provided in a manner which is compatible with other materials of the work, or cannot be properly coordinated therewith, or cannot be warranted as required, or cannot be used without adversely affecting SAGINAW PUBLIC SCHOOLS's insurance coverage on completed work, or will encounter other substantial non-compliances which are not possible to otherwise overcome except by making requested substitution, which F.E.C. thereby certifies to overcome such non-compatibility, non-coordination, non-warranty, non-insurability or other non-compliance as claimed;
 - 3. Where substantial advantage is offered SAGINAW PUBLIC SCHOOLS, in terms of cost, time, energy conservation or other valuable considerations, after deducting offsetting responsibilities SAGINAW PUBLIC SCHOOLS may be required to bear, including additional compensation for redesign and evaluation services, increased cost of other work by SAGINAW PUBLIC SCHOOLS or separate contractors, and similar considerations. SAGINAW PUBLIC SCHOOLS has final position o approval.

- 4. Request for a substitution constitutes representation that F.E.C. has investigated proposed substitution and determined that it meets or exceeds specified product in all respects unless deficiencies are conspicuously noted; will provide same warranty for substitution as for specified product; will coordinate installation and make other changes which may be needed for work to be complete in all respects and do so at his expense; and waives claims for additional costs which may subsequently become apparent. Where such modifications require work by others, such as but not limited to the SAGINAW PUBLIC SCHOOLS, to the Construction Manager, to Other Trades, the cost of said work will be billed ("back charged") against the F.E.C.'s contract.
- 5. Only one request for substitution will be considered for any single product. If substitution is not accepted, provide specified product.
- 6. F.E.C.'s submittal of (and SAGINAW PUBLIC SCHOOLS' acceptance of) shop drawings, product data, or samples which relate to work not complying with requirements of contract documents, does not constitute an acceptable or valid request for a substitution, nor approval thereof.
- 7. No substitutions will be permitted after award of Contract except under emergency conditions such as the sudden and unexpected discontinuance of an item of equipment by the manufacturer. Determination of what conditions warrant emergency substitutions shall be at SAGINAW PUBLIC SCHOOLS' judgment.
 - a. Identification of product or equipment being replaced by substitution, including related specification section and drawing numbers, product data, drawings, and catalog sheets and fully documented to show compliance with requirements for substitutions.
- 8. Because of the practice of certain foodservice equipment manufacturers of offering rebates, gifts, "spiffs," bonuses, premiums, and other benefits to foodservice equipment dealers as well as individual salespeople, and because the eligibility for such benefits may have an influence on the decision by a F.E.C. to propose a substitution, the receipt of and the eligibility for such benefits must be explicitly described. For each proposed substitution, provide statement fully answering the following questions:
 - a. Is your firm eligible for any benefit, including but not restricted to, rebate programs based on quantities purchased in a given period, reductions in future prices, discounts, cash rewards, or credits, should the proposed substitution be accepted?
 - b. Is any individual in your firm eligible for a cash payment, gift, reward, "spiff," or any other form of benefit if the proposed substitution is accepted?
- 9. Be prepared to attest to accuracy and completeness of this disclosure if requested by SAGINAW PUBLIC SCHOOLS, said attestation shall be in the form of a written statement from an officer of the manufacturer attesting to the accuracy and completeness of the F.E.C.'s disclosure. Where the manufacturer is represented by another firm for marketing purposes (commonly referred to as a manufacturer's rep), an officer of the representing firm also shall provide a signed statement attesting to the accuracy and completeness of the F.E.C.'s disclosure. Refusal or inability to provide said statements when requested shall be considered a withdrawal of the proposed substitution.

The fact that a F.E.C. or individual related to him are eligible for benefits should the proposed substitution be accepted does not provide sufficient cause for the proposed substitution to be declined. However, where there is a difference in judgment between the SAGINAW PUBLIC SCHOOLS or SAGINAW PUBLIC SCHOOLS and the F.E.C. as to whether the proposed substitution is in fact an equal to the B.I.B., said benefits will be considered in the decision of whether to accept the proposed substitution.

- 10 The substitution may require changes in the other parts of the work. By acceptance of a proposed substitution no representation is made that the nature or extent of such modifications have been determined except as specifically identified by the F.E.C. in his proposal. All changes to the work required by the proposed substitution, whether or not they are identified in the proposal or subsequently become apparent, shall be completed at the expense of the F.E.C.
- 11 Should a substitution be accepted and should the substitute material, product, or equipment prove to be defective or otherwise unsatisfactory for the service intended, as evaluated by SAGINAW PUBLIC SCHOOLS and within the guarantee period as defined in these specifications, the Foodservice Equipment Contractor shall replace this material, product or equipment at no cost to the SAGINAW PUBLIC SCHOOLS, with that originally specified.
- 12 If a substitution is accepted it is the F.E.C.'s responsibility to insure the electrical and mechanical requirements are correct for the substituted item.
- **D.** Inability to Meet Project Requirements With-out Modification: If base item bid products or equipment must be altered to meet the Specifications, and Bidders make no mention that these alterations cannot be made, it will be interpreted that the bids include the alterations as specified. If Bidders cannot make the alterations that would be required, they must condition their bids with a cover letter stating in what ways the specifications cannot be met and why.

1.07 SUBMITTALS

- **A. Distribution:** Submittals shall be in conformance to the requirements set forth below; all submittals shall be to the parties designated by the Construction Manager; copied to SAGINAW PUBLIC SCHOOLS.
- B. The review of submittals is only for compliance to design intent. SAGINAW PUBLIC SCHOOLS SHALL NOT BE RESPONSIBLE FOR CHECKING DEVIATIONS FROM CONTRACT DOCUMENT REQUIREMENTS OR CHANGES FROM EARLIER SUBMISSIONS UNLESS CONSPICUOUSLY AND SPECIFICALLY NOTED. Where such changes are indicated on shop drawings, note the drawing changes conspicuously and clearly describe the changes in the transmittal that accompanies the drawing.
 - The number of copies to be submitted and the deadline for submittal shall be as determined by SAGINAW PUBLIC SCHOOLS. If the number of copies is not specified, eight (8) copies shall be provided. The F.E.C. will be responsible for distribution of drawings and material documents to parties designated by the Construction Manager.
- C. Product Data: Submit buy out brochures, each item shall have a cover sheet with the following information; Item number, manufacturer, quantity, model numbers, service connection requirements, performances, materials, furnished accessories, power and fuel requirements, water and drainage requirements and other similar information. Second sheet shall be a manufacturers cut-sheet showing technical data, and installation recommendations, service connection requirements, performances, materials, model numbers, furnished accessories, power and fuel requirements, water and drainage requirements and other similar information.
 - 1. Where equipment is fabricated, provide cover sheet with the following information; Item number, manufacturer, quantity, the words "SEE MANUFACTURERS SHOP DRAWINGS", service connection requirements, materials, furnished accessories, power and fuel requirements, water and drainage requirements and other similar information.
- **D. Shop Drawings of Fabricated Equipment:** Submit dimensioned fabrication drawings for custom fabricated equipment including plans, elevations, and sections, showing materials and gauges used. Cross sections and elevations shall be detailed to a scale of 1-1/2" = 1'-0". Show complete details and

- or equal Dimensions of each item of equipment. Drawings shall be based upon and follow the design drawings and these specifications, without reference to field measurements.
- **E.** Utility Drawings: Submit drawings indicating; item numbers, equipment schedule including item number, quantity and description of each item, specific points and types of final connection for all utility requirements for foodservice equipment. Utility connections shall be located both horizontally and vertically and indicate details of connection required on each item. Prepare these drawings at 1/4" = 1'-0" scale. Submit separate drawings for equipment lay-out, electrical, plumbing and ventilation.
- **F. Setting Drawings and Templates:** Submit setting drawing and templates for installation of anchorage devices and for any item where so required in the specifications. Submit setting drawings and templates at full scale.
- **G. Verifying Field Conditions:** When field measurements have been taken, revise mechanical, electrical and ventilation and fabrication drawings to reflect accurately project conditions. Submit in a timely manner for final review, in quantities as specified for original submittals. It is the F.E.C.'s responsibility to make sure all trades are using the most current drawings.
- **H. Operator's Manuals:** Submit three (3) sets of dimensional prints, data sheets, manuals and instructions for properly operating equipment. Instructions for operating each piece of equipment, together with written guarantee and warranty for each piece of equipment shall be bound in a booklet, and presented to SAGINAW PUBLIC SCHOOLS. These shall be submitted prior to final payment or as determined by SAGINAW PUBLIC SCHOOLS.
 - 1. Provide a list; Provide item number quantity, description, manufacturer, model number, of each piece of equipment and service agency contact, complete with name, and phone numbers.
 - 2. Provide manuals, and instructions for each piece of equipment.
 - 3. Provide manufacturers written guarantee and warranty forms for each piece of equipment.
 - 4. Provide as part of the manual three (3) sets of as-built drawings of each drawing that was supplied by the F.E.C.
- **I.** Samples: Submit samples of materials and products where indicated.
 - 1. Submit three of each sample, two of which shall be returned.
 - 2. Samples shall be of sufficient size and quantity to illustrate the functional characteristics of the product with integral related parts and attachment devices and to clearly express the full range of color, texture, and pattern.
 - 3. Do not use products in the work until required sample review is complete.
- **J. Final Distribution:** F.E.C. shall be responsible for distributing the most current, up to date information which include, all shop drawings, utility drawings, buy-out books and all other documentation to all parties.

1.08 QUALITY ASSURANCE

A. Manufacturer's Qualifications: The manufacturer must be able to show that it has been regularly engaged in manufacturing of food service equipment of types, capacities, and sizes required, and that its products have been in satisfactory use in similar service for not less than five years.

- **B.** Foodservice Equipment Contractor's Qualifications: Only those firms who can meet the following qualifications will be considered for this work:
 - 1. The F.E.C. shall have at least five years successful experience furnishing and installing foodservice equipment on projects similar in size and scope to that required for this project.
 - 2. The F.E.C. shall be the recognized distributor for the items of equipment specified herein, if of other manufacture than his own.
 - 3. F.E.C. shall have the financial resources to enable him to handle the work in a satisfactory manner and to deliver the required items of equipment so as not to delay the progress of the work.
 - 4. The F.E.C. shall be fully capable of fulfilling the terms and conditions of the warranty provisions required by this contract.
 - 5. The F.E.C. shall be capable of providing a performance bond when and if required.
 - 6. Upon demand, the Foodservice Equipment Contractor being considered for possible negotiation shall submit to SAGINAW PUBLIC SCHOOLS evidence of his ability to fulfill these requirements.
- **C. Fabricator's Qualifications:** Where specified units require custom fabrication, provide units fabricated by shop with a minimum of five years of experience in similar work. Fabricate all custom equipment items at same shop. Where units cannot be fully shop-fabricated, complete fabrication work at project site must be in conformance to specification.

Approved Fabricators are:

Titan Stainless, 404 State Rd. S-13-903, Pageland, SC 29728 (704) 800-0780 Professional Restaurant Service, 14057 Stephens Rd., Warren, MI 48089 (586) 772-7652

Other fabricators to be considered must be submitted to SAGINAW PUBLIC SCHOOLS for approval in writing prior to submitting bid, or offered as a voluntary alternate and listed separately from the base bid.

1.09 REFERENCE STANDARDS

- **A. Sanitary Construction and NSF Standards:** Comply with applicable National Sanitation Foundation (NSF) standards and recommended criteria. Provide each principal item of food service equipment with a NSF "Seal of Approval".
- **B. UL Labels:** Where available, provide UL labels on prime electrical components of food service equipment. Provide UL "recognized marking" on other items with electrical components, signifying listing by UL, where available.
- **C. ANSI Standards:** Comply with applicable ANSI standards for electric powered and gas-burning appliances, for piping to compressed gas cylinders, and for plumbing fittings including vacuum breakers and air gaps to prevent siphonage in water piping.
- **D. NFPA Codes:** Install food service equipment in accordance with the following National Fire Protection Codes (NFPA) Codes:

NFPA 54 - National Fuel Gas Code.

NFPA 70 - National Electrical Code.

NFPA 96 - Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment.

E. ASME Boiler Code: Construct steam generating and closed steam heated equipment to comply with

American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code; Section IV for units not exceeding 15 PSI or 250 degrees F, Section I for higher pressure or temperature units.

- **F. Health Code:** Install food service equipment in accordance with local health department applicable regulations.
- **G.** Architectural Millwork: Casework construction shall be of custom grade in accord with the standards of the Architectural Woodworking Institute, or better. Casework will be considered any construction or fabrication requiring the use of wood or laminate.
- H. Overlapping and Conflicting Requirements: Where compliance with two or more industry standards or sets of requirements is specified, and overlapping of those different standards or requirements establishes different or conflicting minimums or levels of quality, the most stringent requirement (whether most costly or not) is intended and will be enforced, unless specifically detailed language written into contract documents clearly indicates that a less stringent requirement may be fulfilled. Refer instances of uncertainty as to apparent conflicts of standards to SAGINAW PUBLIC SCHOOLS before proceeding.
- I. Minimum Quality or Quantity: In every instance, quality level or quantity shown or specified is intended as minimum for the work to be performed or provided. Except as otherwise specifically indicated, actual work may either conform exactly to that minimum (within specified tolerance levels), or may exceed that minimum (within reasonable limits). Refer instances of uncertainty as to quality or quantity intended to SAGINAW PUBLIC SCHOOLS before proceeding.

1.10 STORAGE, DELIVERY AND HANDLING

- **A. Storage:** F.E.C. shall provide at his own expense a safe and secure area in which foodservice equipment can be stored. Provide adequate protection from damage to or loss of foodservice equipment. Store foodservice equipment in their original containers.
 - 1. Should the SAGINAW PUBLIC SCHOOLS provide a facility for the receiving and storage of foodservice equipment, the F.E.C. shall nevertheless retain full responsibility for the condition of the equipment, shall fully insure it and name the SAGINAW PUBLIC SCHOOLS as additionally insured, and shall hold the SAGINAW PUBLIC SCHOOLS harmless from any damages or loss that should occur while stored in the SAGINAW PUBLIC SCHOOLS's premises.
- **B. Delivery:** Do not deliver foodservice equipment until project conditions permit prompt installation. If the SAGINAW PUBLIC SCHOOLS or Construction Manager determine that the site is not ready for any equipment shipped to same, the F.E.C. will retain said equipment in his storage facilities until the site is ready for installation. Deliver food service equipment to the project site in factory-fabricated containers designed to project equipment and finish until final installation.
 - 1. Any piece of equipment that proves impractical for delivery in one piece may be delivered in sections, but all working surfaces shall be fitted and field welded, with working surfaces ground and polished on premises, so that upon completion each item of equipment will have true, smooth and even surfaces. Butt jointing and filling with solder will not be permitted.
- **C. Handling:** Handle food service equipment carefully to avoid damage to components, enclosures, and finish. Do not remove covering until required to clean, test, calibrate and demonstrate, the unit. Do not install damaged food service equipment; replace and return damaged components to equipment manufacturer.
- **D.** Scheduling and Timeliness: Delivery and storage of all equipment shall be done at such time when construction, finish and mechanical work have progressed to a point permitting such installation. The details of setting and installation shall be so arranged that work of other contractors shall progress without being unnecessarily interfered with, or damaged.

E. Protection of Equipment: All equipment shall be received at the building or construction site fully insured. It will be the responsibility of the Foodservice Equipment Contractor to protect the equipment until completely installed, connected, and approved by SAGINAW PUBLIC SCHOOLS, subsequent to the completion of the contract work.

1.11 PROJECT CONDITIONS

- **A. Verification:** Check electrical characteristics, and water, steam, and gas pressure. F.E.C. shall provide pressure regulating valves where required for proper operation of equipment.
- **B. Existing Food Service Equipment (if applicable):** F.E.C. shall tag or mark all equipment scheduled to be re-used. This shall be done prior to disconnecting of the equipment. The F.E.C. shall be held accountable for any missing equipment for failure to tag or mark the equipment. All existing equipment shall be removed from the facility prior to construction or at a date specified by the SAGINAW PUBLIC SCHOOLS or SAGINAW PUBLIC SCHOOLS.
 - 1. Equipment scheduled for reuse shall be taken to the F.E.C.'s storage area, and stored until it can be transported to the project site and installed. During the time said equipment is in the F.E.C.'s possession, it shall be protected from loss and damage, and shall be delivered to the project site in perfect operating condition.
 - a) Equipment shall be cleaned.
 - b) Painted when specified.
 - c) Repaired or modified to its best working condition when specified.
 - 2. Equipment not scheduled for reuse shall be removed to location(s) designated by the SAGINAW PUBLIC SCHOOLS by the F.E.C. With the SAGINAW PUBLIC SCHOOLS's concurrence, the F.E.C. may submit an offer to purchase all or part of the remaining equipment; and/or a cost proposal for removing and disposing of scrap equipment.
 - 3. Disconnects of existing equipment shall be completed by F.E.C or their contracted trades and moved to location stipulated by SAGINAW PUBLIC SCHOOLS.
- C. Protection of Work and Property: The Foodservice Equipment Contractor will be held responsible for any damage to SAGINAW PUBLIC SCHOOLS's property caused by delivering, uncrating or installing of the Kitchen Equipment. If any damage is caused by the Foodservice Equipment Contractor, his agents, or subcontractors, the SAGINAW PUBLIC SCHOOLS's property shall be restored to its original condition at the expense of the Foodservice Equipment Contractor.
- **D. Use of Premises:** The Foodservice Equipment Contractor shall confine the storage of equipment, materials, tools, and all other things related to his work to space allotted to him by the SAGINAW PUBLIC SCHOOLS.

PART 2 -- PRODUCTS

2.01 GENERAL STANDARDS OF QUALITY

A. Quality of Material: Unless otherwise specified or shown on drawings, all material shall be new, of best quality, perfect and without flaws. It shall be of the best of their respective kind, equal to the standards of manufacture used by the Duke Manufacturing Company of St. Louis, Missouri. All labor shall be performed in a thorough workmanlike manner. Work to be performed by qualified, efficient, skilled mechanics of the trades involved.

2.02 MATERIALS

- **A.** New Materials: All materials shall be new, of first grade, no seconds will be acceptable.
- **B.** Gauge: Gauges herein specified shall refer to United States Standard Gauge for sheet metal and plate.
- C. Stainless steel: All stainless steel shall be of the gauge specified (U.S. Standard) 18.8 composition which is generally known as Type 302 or Type 304, and shall have a Number 4 Finish (125-150 grit) as manufactured within the continental limits of the United States. Each piece of equipment shall be specified by gauge with either a general specification form or under the item specifications. All sheets shall have a genuine mill finish of not less than 150 grit on one side and not less than 80 grit on the back side. All stainless steel sheets shall bear the manufacturers trade mark, designation of type, and heat number. All stainless steel sheets shall have the following content:

Chromium - 18 percent minimum Nickel - 8 percent minimum Carbon - .2 percent maximum

Straight chrome iron or copper bearing straight chrome steel is not acceptable. All stainless steel sheets shall be stretcher leveled. All sheets shall be free of buckles, warps, and surface imperfections. A hard ground finish will not be acceptable.

- **D.** Stainless steel sheets: shall be of cold rolled stock.
- **E.** Stainless steel pipe and tubing: ASTM A 554, Type 304 with No. 4 polished finish; shall be seamless or welded, of gauge specified, of true roundness. Seamless tubing shall be thoroughly and properly annealed, pickled and ground smooth. Welded tubing shall be thoroughly heat-treated and properly quenched to eliminate carbide precipitation. V-Clad shall not be permitted.
- **F.** Galvanized iron: Wherever specified, galvanized iron shall be of an approved grade of either low carbon steel or copper bearing steel. All sheets are to be commercial quality, stretcher leveled, and re-rolled to insure a smooth surface.
- **G. Galvanized Sheet Steel:** ASTM A 526, except ASTM A 527 for extensive forming; ASTM A 525, G90 zinc coating, chemical treatment.
- **H. Sheet Steel:** ASTM A 569 hot-rolled carbon steel.
- **I. Aluminum:** ASTM B 209 sheet and plate, ASTM B 221 extrusions, 0.40-mill clear anodized finish where exposed, unless otherwise indicated.
- J. Galvanized Iron: Shall be approved grade of either pure wrought iron or copper bearing steel.
- **K.** White Metal: Corrosion-resistant metal containing not less than 21 percent nickel. Make castings free from pit marks, runs, checks, burrs, and other imperfections, rough grind, polish, and buff to bright luster.
- L. Plastic Materials and Components: Provide plastic materials and components which conform to NSF 51
- M. High Pressure Decorative Laminate (HPDL): HPDL shall be selected by the client from manufacturer's standard palette of colors, unless otherwise indicated. Provide HPDL conforming to NEMA Standard LD3-1985.

- 1. Where the use of HPDL with a wear resistant finish is indicated, provide such (e.g. Nevamar's ARP Surface, Wilsonart "Tufsurf 2," etc.) of a nominal thickness of .060"
- 2. Where the use of HPDL of solid color or "color through" is indicated, provide such (e.g. "Solicor" by Wilsonart).
- 3. F.E.C. shall provide fire rated laminate where required by code.
- **N. Hardwood Work Surfaces:** Laminated edge-grained hard maple (Acer saccharum), NHLA First Grade with knots, holes and other blemishes culled out, kiln dried at eight percent or less moisture, waterproof glue, machined, sanded, and finished with NSF-approved oil-sealer.
- **O. High Density Particle board.** Where indicated in counter or cabinet construction, provide high density Particle board such as "Novoply."
 - 1. F.E.C. shall provide fire rated laminate where required by code.
- **P. Plywood.** Where cabinet or counter construction calls for plywood, use birch grade paint finish standard or grade as indicated.
- **Q. Sound Deadening:** Sound deaden underside of table with premium type mastic, that "skins" on surface when dry. Surface of mastic coating shall be smooth, equal to the standard for hot-rolled steel finish, 3M Coating #1000 E/C or equivalent.
 - 1. Apply two (2) coatings of sound deadening material to underside of tops, drain boards, dishtables, counters, and sinks.
 - 2. Apply sound deadening during fabrication. Touch up on project site if required.
- **R.** Sealants: ASTM C 920, Type S Grade NS, Class 25, Use NT. Provide sealant that when fully cured and washed meets requirements of Food and Drug Administration Regulation 21 CFR 177.2600 for use in areas where it comes in contact with food.
 - 1. Color: As selected by SAGINAW PUBLIC SCHOOLS from manufacturer's standard colors.
 - 2. Backer Rod: Closed-cell polyethylene rod stock, larger than joint width.
- **S. Gaskets:** Solid or hollow (not cellular) neoprene or PVC; light gray, minimum of 40 Shore A hardness, self-adhesive or prepared for either adhesive application or mechanical anchorage.

2.03 MANUFACTURED OR FABRICATED COMPONENTS

- **A. Wall Anchors:** Wherever it is necessary to mount fixtures that are supported from the wall, the fixtures shall be securely attached thereto by means of stainless steel tapped screws into stainless steel face and anchor type grounds that are built into the walls. Furnish these grounds to other trades at proper time so other trades can build them into the walls as work progresses. Itemized specifications note fixtures requiring such grounds. It is the responsibility of the F.E.C. to coordinate and provide these anchors in a timely manner.
- **B.** Chair Carriers: Furnish chair carriers as needed for hanging wall-mounted equipment. Provide guarantee that chair carriers are of sufficient strength and quantity to support specified load Chair carrier shall be of all-welded stainless steel construction and mounted within half or full wall so that weight of table and equipment is transferred to floor. Chair carriers may be fabricated or purchased from outside manufacturer. Provide SAGINAW PUBLIC SCHOOLS with drawings of this item for approval prior to fabrication and installation.

- **C. Floor Anchors:** Wherever it is necessary to mount fixtures to the floor, the fixtures shall be securely attached thereto by means of stainless steel tapped screws
- **D. Faucets:** Furnish all faucets including spray rinse units and wall brackets. Drill and finish fixtures in preparation for installation. Provide loose to installing contractors. Faucet nozzles are to be centered over sink drain.
 - 1. Deck mounted faucets with 4" centers shall be T & S Brass & Bronze Works #B-0225 or approved equal, ½" inlet.
 - 2. Deck mounted faucets with 8" centers shall be T & S Brass & Bronze Works #B-0221 or approved equal, ½" inlet.
 - 3. Backsplash mounted faucets shall be T & S Brass & Bronze Works B-0231 or approved equal, ½" inlet.
 - 4. Pot sink faucets shall be T & S Brass & Bronze Works B-0291 or approved equal, 3/4" inlet.
 - 5. Wall mounted pot and kettle tilting faucet; dual temp. T & S, B-0597; single temp. T & S, B-0592, ½" inlet.
 - 6. Built-in dipperwell, faucet and sink Fisher Faucets #304.
 - 7. Pre-Rinse faucets; deck mounted T & S, B-0113, splash mounted T & S, B-0133 or approved equal.
- **E. Potable Water Protection & Vacuum Breakers:** Furnish all protection devices unless otherwise indicated in the item specifications. Drill and finish fixtures in preparation for installation. Provide loose to installing contractors.
 - 1. Air Gap: The distance of a water inlet or opening above the maximum high water level or overflow rim in a fixture, device, or container. A "safe air gap" is at least 2 times the diameter of the water inlet pipe, but not less than 1 inch and need not be more than 12 inches.
 - 2. Reduced Pressure Principle Devise (RPZ): It consists of 2 independently acting internally loaded check valves separated by a reduced pressure zone. A differential pressure relief valve is located within the zone to maintain the reduced pressure and also discharge water to atmosphere during periods of backflow. This device is used as protection for all direct or indirect cross connections. The device may be subject to backpressure or back siphonage of toxic chemicals, sewage, or other lethal substances.
 - 3. Pressure Vacuum Breaker: This device allows air to enter the waterline when the pressure in the public system or the service line is reduced to 0 or below. The device has a vacuum relief valve which is internally loaded, normally by means of a spring. May be installed for use under continuous line pressure. Must be installed at least 12" above the highest outlet it is to serve.
 - 4. Atmospheric Vacuum Breaker: Allows air to enter the waterline when the pressure in the public system or the service line is reduced to 0 or below, however, since the vacuum relief is not internally loaded the device must be installed on a discharge side of the shut off valve. Should not be subjected to continuous flows for periods of more than 12 hours and must be installed at least 6" inches above the highest outlet it is to serve.
 - 5. Double Check Valve Assembly: Consists of (2) two independently acting internally loaded check valves. This device may be used for backpressure or back siphonage situations, only if the cross-connection protection is from substances that do not constitute a health hazard.

- **F. Rotary Waste Valves:** Provide two-inch, heavy cast-bronze body, removable flat stainless steel strainer, twist handle waste outlet, and one-piece connected chrome-plated brass overflow, unless otherwise stated in the item specifications. Provide waste and overflow by Fisher Faucets, 6100 series, or approved equal.
- **G. Casters:** Provide four-inch minimum diameter wheel casters, with 1-1/8 inch tread width, conforming to NSF standards, unless otherwise noted in item specifications. Provide sealed, self-lubricating bearings, cadmium-plated or bright zinc-plated steel disc wheels, and solid synthetic rubber tires. Provide foot brakes on (2) two casters per unit unless otherwise specified.

2.04 ELECTRICAL REQUIREMENTS - GENERAL

- A. Electric Heating Equipment: Verify to project conditions.
- **B. Wiring:** In general, equipment shall be provided with all necessary internal wiring, properly carried externally where required, for termination in junction box, motor starter, et cetera. All wiring provided under this contract shall be in full accordance with the latest edition of the National Electric Code. Further, all wiring provided shall be contained in a metallic raceway, approved by engineer, consisting of a specially fabricated wire-way as in the case of work built into counter work, or in conduit of proper material, or Greenfield flexible conduit, all with necessary provisions for grounding continuity. All conductors provided shall have proper temperature ratings.
- **C. Thermal overload protection:** All motors of equipment provided shall have the thermal overload protection provided.
- **D. Control equipment:** Provide all necessary electrical control equipment and wiring, except as otherwise outlined, mounted on equipment where practicable, or where shown on plan.
- **E.** Cover plates: All receptacles to have 1040 stainless steel or chrome plated brass cover plates with stainless steel or chrome plated brass screw for all outlets provide in equipment.
- **F.** Cords: Flexible cords to be provided on equipment shall have grounding conductor and shall be of best quality available to industry, equal to Simplex-Tryex, selenium neoprene.
- **G. Motor starters:** Provide required starters for all motors. Motor starters required for foodservice equipment and not provided by Other Trades shall be thermal overload protective type, manual wherever possible, equal to New Series Allen Bradley Bulletin #709 magnetic with necessary accessory equipment where required for proper operation. Where required, fully magnetic type W.P.B. station shall be furnished. All manual and magnetic type motor starters provided under this contract for 3 phase motors shall be 3 thermal element type, requiring special coordination with starter manufacturer. This requirement is not repeated elsewhere in the detailed specifications.
- **H. Motor Thermal Protection:** In instances in which motor thermal protection cannot be built-in where specified into motors provided with equipment, the Food service Equipment Contractor shall provide externally mounted overload devices of proper number of poles and capacity equal to Turnbull "TT" or Allen Bradley, and shall carry wiring from motor terminals to these devices in manner approved by inspection authorities as being in full accord with applicable electrical codes and engineers plans.
- **I. Wire:** Except as otherwise required, all wire provided shall be type THW dual rating. Wire in counter raceways to be heat resistant type, AVA or equal.
- **J. Openings:** Provide proper openings through all equipment and shelves for piping and electrical conduits. All openings are to located as close to the rear of the counter and sized just big enough for

- the pipe or wire. All openings shall be smooth, so not to damage or cut the piping or electrical wires.
- **K. Panelboards:** Panelboards shall be UL listed and properly sized in compliance with National Electric Code.
- **L. Floor Based Electrical Connections:** shall be made in a manner that will allow portable equipment connected to the floor electrical supply to pass over the point of connection without interference.
- **M. Code Compliance:** All electric work to be performed in accordance with the National Electric Code and local regulations.
- **N. Other Conditions:** If not provided by other contractors, F.E.C. to provide all electrical parts including but not limited to contactor strips, line shunts, relays, disconnects (both mechanical and electrical), loose parts and labor required for installation of same not provided by other contractors and pertinent to the installation of equipment under this section. A non-limiting example of this type of equipment would be contactor strips required for the proper operation of fire protection systems.

2.05 STEAM PRESSURE, STEAM THERMOSTATS, STEAM COILS

- **A. Steam Pressure:** All steam operated pressure vessels such as Kettles, Steamers, Urns, et cetera, shall be constructed to A.S.M.E. and the Code requirements of the State in which the project occurs and shall bear labels and certificates of compliance therewith.
- **B. Steam Thermostats:** Provide steam thermostats or temperature regulators for steam heated equipment if required for proper operation of the piece of equipment, or if so required in the Itemized Specifications.
- **C. Steam Coils:** All steam coils shall be installed in sufficient quantity to provide ample heat at the available steam pressure (Verify project conditions). They shall be tested for 100 pounds per square inch working pressure.
 - 1. In fixtures having coils under more than one shelf, all coils shall be connected together with inlet and outlet extended down through base of fixture to point indicated on drawings for installation of stop valves and final connection.
 - 2. Unless otherwise specified, coils are to be 7/8" O.D. hard copper tubing with brass fittings. Where immersed in water, coils are to be mounted on strap type brackets or feet with a clearance of not less than 1" below coils for cleaning purposes. These feet are to be soldered water-tight to the bottom of the pan in which coils are mounted. Couplings shall be welded or braised in the bottom or sides of fixtures for steam inlet and outlet, and shall extend through fixture ready for final connections.
 - 3. Boiler permits shall acquired by the installing contractor and all fee's shall be paid by the installing contractor.

2.06 LOCKS

A. Cabinets and Refrigerated Units: Provide integral locks on all cabinets and refrigerated units. Locks shall be of sufficient strength to prevent unauthorized entry into the locked space. Locks shall be of the key and cylinder type with tamper-proof mechanisms. Furnish SAGINAW PUBLIC SCHOOLS with three (3) sets of keys to each lock at the conclusion of the project, accurately labeled and turned over to the SAGINAW PUBLIC SCHOOLS all at one point in time. This lock standard applies to all cabinets unless otherwise indicated in item specifications.

2.07 FABRICATION, GENERAL

A. Welds: All workmanship shall be done with welded rod of same composition as sheets or parts welded. Welds shall be strong, ductile, with excess metal ground off and finished smooth to match adjacent surface. Welds shall be free of imperfections as pits, runs, spatter, cracks, et cetera, and shall have the same color as adjacent sheet surfaces. All joints in top fixtures, tables, drainboard, exposed shelving, sinks, et cetera, shall be electrically welded. Butt welds made of spot welding straps under seams and filling in with solder will not be acceptable. It is the intention of these specifications that all welded joints shall be homogeneous with the sheet metal itself. Where sheet sizes necessitate a joint, such joints shall be welded. Tops of fixtures shall be fabricated at the factory with welded joints to reduce field welding.

Under no circumstances are any welds to be spray painted. All welds are to be ground and polished smooth.

- **B. Field Joints (Welded):** Where field joints are necessary, the tops shall be continuous. Items shall be made in maximum length sections as possible and with as few joints as necessary. Provide proper joint preparation and location. Access shall be provided, where possible, to the back side of the welds. Joints shall be located to provide the minimum length of seam. Field joints are to be provided only for the convenience of installation and shall be held to an absolute minimum. Show proposed field welds on shop fabrication drawings.
- **C. Field Joints (Bolted):** Bolted field joints, if specified as acceptable, are to be drawn tight leaving a hair-line seam and shall not have any exposed screws or rivets. Joints shall be neatly and carefully fabricated to make the very best appearing joint possible. After equipment is set in place, all field joints shall be tightly pulled together leaving only a hair-line seam. The alignment of the joints shall be made in such a manner that they shall be tightened both horizontally and vertically. Show proposed bolted field joints on shop fabrication drawings.
- **D. Surfaces:** All surfaces shall be completely free of burrs, rough edges, slag, or any other debris.
- **E.** Other Exposed Surfaces: All coved corners, legs, table tops and all other exposed surfaces to be ground smooth and polished to a #4 finish.
- **F. Exposed Joints:** All exposed welded joints including field joints shall be suitably ground flush with the adjoining material and neatly finished to harmonize and appear the same.
- **G. Depressions:** Wherever material has been depressed or sunken in by the welding operation, such depressions shall be suitably hammered and peened flush with the adjoining surfaces and, if necessary, again ground to eliminate low spots. All ground surfaces shall then be polished or buffed to match adjoining surfaces consistent with good workmanship.
- **H. Discoloration, etc.** Care shall be exercised in all grinding operations to avoid excessive heating of the metal and metal discoloration. In all cases the grain of rough grinding shall be removed by successive finer polishing operations.
- **I. Finished Texture:** The texture of the final polishing operation shall be uniform and smooth consistent with reasonable care and good workmanship. The general finish of all metal shall be of high grade.
- **J. Break Bends:** Wherever break bends occur, they shall be free of open texture or orange peel appearance; and where such break does not mar the uniformity of the appearance of the material, all such marks shall be removed by suitable grinding, polishing, and finishing.
- K. Sheared Edges: Wherever sheared edges occur, they shall be free of burrs, projections, and fins to

- obviate all danger of cutting and laceration when the hand is drawn over such sheared edges.
- **L. Miters and Bullnose Corners:** Where miters or bullnose corners occur, they shall be neatly finished with the under edge of the material neatly ground to a uniform condition and in no case will overlapping material be acceptable.
- **M. Finish:** It is the intention of these specifications to describe fabrication of a quality finish consistent with the highest grade of manufacturing practices in the industry. Edges of tops and over shelves shall be highly polished or "Hi-Lited" where required by the Item specifications. Final approval of surface finishes shall be by SAGINAW PUBLIC SCHOOLS.

2.08 PIPE CHASES

- **A. Pipe Chase Panels:** Where top arrangement of enclosed base tables make it necessary for plumbing and supply piping to be passed through the base, this piping shall be enclosed in a suitable pipe chase with easily removable access panels. These access panels are not to be held in place with screws or latches, but are to be formed up in a pan shape, removable without the use of tools. The foregoing only applies to fixtures where an access is required from the front of the fixture, as in the case of pipe chases at end of fixtures containing bottom and intermediate shelves need not be enclosed unless specifically called for in the Itemized Specifications. Unless otherwise specified, shelves in these fixtures will be turned up a minimum of 3" at the edge of the pipe chase.
- **B.** Access Panels: Where access panels are specified, the panels shall be used for access to drains and electrical junction boxes only. The access panels are used for cleaning and maintenance only they shall not be used for electrical, plumbing, chases and rough-in penetrations. The access panel shall be made of matching material and removable with out tools.
- **C.** Consult with Piping Contractors: In detailing fixtures, consult with piping contractors to be certain that due space allowance is made for traps and other controls, particularly under lower shelves.
- **D. Shelf Penetration:** Where plumbing and supply piping pass through shelves on open base tables, shelves shall be neatly punched or die-stamped for the piping. Show the location of such pipe chases, or stamped pipe openings, on plan and/or detail drawings. Provide sufficient size to accommodate all necessary risers so that additional holes need not be cut in the field. Coordinate with plumbing contractors, cautioning them that all piping must be run through chases or slots as provided.
- **E. Utilities Housing:** All utilities for counters and fabricated equipment will be housed in chases constructed for same, pre-wired to minimize field wiring and plumbing.

2.09 SANITARY CONSTRUCTION

A. Approvals: All fabricated equipment is to be constructed in strict compliance with the standards of the National Sanitation Foundation as outlined in their bulletin on Food Service Equipment entitled "Standard No. 2" dated September, 1978, and in full compliance with the Public Health Regulations of the locality in which the installation is to be made. All fabricated equipment shall have the seal of approval of the National Sanitation Foundation and if required by code UL approval seal of approval.

2.10 SINKS

A. Construction: Sinks and frames shall be constructed of 14 gauge stainless steel. The front shall extend up 2-3/4" higher than the drainboard line and shall be finished with a 1-3/4" wide channel rim, running full length, with ends of sink frame constructed for welding to drain boards where such are specified. Sink bowls, unless otherwise indicated in item specifications, shall be 14 gauge stainless

steel fully welded to frames so that no joint is visible. Where required, provide sinks with drain boards, backsplashes, heaters, or water circulation systems.

- 1. Where drain boards are required, they shall be electrically welded to the sink frame to provide an integral unit.
- 2. Where the sink is free standing without drain boards, the channel rims shall continue around both ends with the corners of the channel edge rounded to conform with the radius of the inside vertical corner of the sink. Corners shall be electrically welded.
- 3. Where a backsplash is required, the rear of the backsplash shall extend to the specified height above the drainboard work surface, with the top edge returning to the wall at a 45 degree angle and forming a 2-1/4" clear pipe chase.
- 4. The ends of the sinks shall be electrically welded to the body of the sink with all vertical and horizontal corners formed on a 3/4" radius with welds ground and polished smooth to a #4 finish.
- 5. Bottom of sinks shall be depressed and slope to a twist handle waste with handle constructed of 3/8" stainless steel rod extending to the front of the sink. This twist handle drain shall have a built-in connection for an overflow pipe. Rear of overflow connection to have a polished nickel allow front plate and shall be completely connected to the drain with nickel plated brass tubing. The Twist handle shall be supported by a stainless steel bracket welded to the underside of the sink.
- 6. Provide at top center rear of each compartment, below the drainboard line, a polished cast nickel bronze overflow with 1-1/4" O.D. brass tubing connection to outlet at back of drain.
- 7. Where multiple sink bowls are welded to a frame, a minimum 2" between bowls shall be provided to prevent temperature transfer and front of sinks shall be clad in 14 gauge stainless steel frontispiece.
- 8. Where sinks are specified to set into counter tops, the sinks shall be electrically welded to top with continuous weld, ground smooth so that no seam is visible and surfaces match. Drop in sinks with hardware fasteners will not be accepted unless specifically called for in the Item Specifications.
- 9. All interior and exterior horizontal and vertical bonds and corners shall be rounded on a 3/4" radius with all joints welded.
- 10. Mount fill faucets in backsplash. Single compartment sinks shall be fitted with two (2) holes on 8" centers over the center compartment. Where sinks have two or more compartments, provide two (2) holes on 8" centers over the partition(s). Fit sink(s) with combination chromium plated swing spout faucet(s).
- **B. Drain boards:** Construct of #14 gauge polished stainless steel welded integral to the body of the sink with continuous rolled rims and splash of the same height and design as the sink. Roll rim heights at the shallow end shall be 1" high sloping approximately ½" to the sink body, unless otherwise specified. All drain boards shall have horizontal corners coved on 1/4" radius with the vertical corners coved on 1/4" radius. Drain boards must slope in the direction of the sink, so water will not pool.
- **C. Legs:** Sink legs shall be as specified under "Table and Sink Legs". Legs shall be attached with a #14 gauge stainless steel gusset to the underside of the sink body. The gusset shall be conical shaped and provided with an allen head dog point set screw.
- **D. Additional Considerations:** Where so indicated by the Item Specifications, provide sinks as follows:

- 1. Where "plug and chain drain" is specified, sink bowls shall slope to a drain which shall be a standard 1-1/2" drain with plug and chain.
- 2. Where "basket strainer drain" is specified, sink shall be fitted with a 1-1/2" cup strainer assembly.
- 3. Where "sink compartment heater" is specified, sink compartment shall be heated with electric immersion elements with low water cutout and thermostatic control, as manufactured by Hatco or approved equal, and of sufficient wattage to assure 180°F rinse water.

2.11 COUNTER AND TABLE TOPS - METAL CONSTRUCTION

- **A. Tops and Edges:** Counter and table tops shall be fabricated with type of edge as specified. The definite choice as to the type of edge profile to be used shall be made before the time of bidding. If unspecified, the edge will be metal edge profile No.3. All tops, unless otherwise specified, shall be 14 gauge stainless steel.
- **B. Top Bracing:** Tops shall be braced with 1-1/2" x 1-1/2" x 1/8" galvanized angles and 1-1/2" x 3" x 1-1/2" #14 gauge galvanized channels. On open base tables, one channel shall be placed at each pair of legs. A longitudinal angle shall be placed between the channels for additional top support.
- **C. Underbracing:** Underbracing, will be constructed of stainless steel channels, size same as in A & B above. When stainless steel underbracing is utilized, the above sized channel will be used throughout for underbracing.
- **D. Top Fastening:** Tops shall be fastened to the framing members with protruding studs. Studs shall be welded to the underside of the table top and fastened by means of chrome plated lock washers and acorn nuts.
- **E.** Backsplashes: Backsplashes shall be of the height specified with the standard height being 6" on serving counters, 10" overall on worktables and 10" on dish tables. The splash shall be returned 2" on a 45° angle. All corners of tops formed by bending and/or welding shall have a radius of 3/4".

2.12 SOUND DEADENING

A. Application: Apply sound deadening material to all tables, counters, sinks, etc. per section 2.02.

2.13 TABLE AND SINK LEGS

- **A. Materials:** All legs for open base tables, sinks, and dish tables shall be constructed of stainless steel, 14 gauge, seam welded and polished to a #4 finish, unless otherwise specified. Cross rails, where required, shall be of 1-1/4" #14 gauge wall welded tubing of stainless steel. Cross rails shall be welded to legs with the resulting welds ground and polished to a smooth finish. All legs shall be fitted with a stainless steel adjustable bullet foot having a minimum of 1" adjustment. All feet furnished shall be vermin proof having closed bottoms of stainless steel with unexposed threads and a minimum clearance between the foot and the leg of 1/32".
- **B.** Tops: Tops of legs shall be welded to 14 gauge stainless steel section of channel, closing top of leg, and this channel section shall be sized to nest inside table reinforcing channel and then is bolted in place with stainless steel bolts and lock washers through both vertical channel legs and gusset if open leg type table. Wherever threads of bolts and screws on the inside of fixtures, which are either visible or might come in contact with the hand or wiping cloth, such bolts and screw threads shall be capped

- with suitable lock washer and chrome plated brass or bronze acorn nut. Where screw threads are not visible or readily accessible, they might be capped with a standard lock washer and steel nut treated to prevent rusting or corroding.
- C. Gussets: All gussets shall be fully enclosed stainless steel and provided at all leg locations. These gussets shall be one hundred percent (100%) welded to channels in a water-proof, vermin-proof manner. Where gussets occur at angle iron framework provide triangular 12 gauge stainless steel corner plates, welded to bottom edge of angle frame, and weld gusset to triangular plate. These gussets shall have 16 gauge stainless steel exterior case complete with galvanized interior case. Legs shall slip fit into internal case and be held in place with stainless steel set screw.
- **D.** Cabinet and warmer legs: All cabinets, warmers, and/or other enclosed bodies unless otherwise specified are to be mounted on round pattern adjustable legs. Legs shall be of 1-5/8" o.d. stainless steel seamless tubing having a stainless steel adjustable bullet shaped foot with a minimum of 1" of adjustment. Legs shall not be less than 6" high overall. Legs shall be welded to a 14 gauge dieformed stainless steel mounting plate. This plate shall telescope into a 14 gauge galvanized channel welded to the underside of the body. This channel shall extend the full length of the cabinet. The leg mounting plate shall slide in the channel to permit relocation and removal of the leg. The die forming plate shall have a center embossing for the 1-5/8" o.d. leg tubing and shall have a clinch nut inset screw for locking the leg in place.
- **E.** When to Omit Front Cross Rails: Only where indicated, legs are to be without lower tubing cross-bracing in order to provide space for mobile item storage.
- **F.** Lower Shelves: Where lower shelves are specified, these shelves shall be permanently welded to legs except when removable shelves are specified, and the stainless steel tubing cross rails will be omitted.
- **G. Quantity:** Unless otherwise specified, tables and open base fixtures up to 6'-0" in length shall have four (4) legs. Tables from 6'-0" to 12'-0" in length shall have six (6) legs and tables from 12'-0" in length to 18'-0" in length shall have eight (8) legs or more as required to make a substantial fixture to accommodate special construction.

2.14 CABINETS - BASE UNITS; METAL CONSTRUCTION

- **A. Construction Standards:** To be constructed to standards indicated in section 2.02 of these specifications. All casework to be stainless steel construction, unless otherwise noted.
- **B.** Countertops: All countertops to be 14 gauge stainless steel, unless noted otherwise. Provide square rim edge, unless noted otherwise. 4" high splash at all back and side walls, unless noted otherwise. Countertops to be constructed to sizes and profiles shown on plans.
- **C. Support:** All cabinets having a clear span below, shall be capable of sustaining a 300-pound load at the front edge of the counter at mid-span.
- **D. Base:** Cabinet bases shall be mounted on 12 gauge galvanized steel channel. All base cabinets shall have a 6" high toe space. The finish base applied thereto shall be the same base as in the rest of the room, and shall be applied thereto by that respective contractor, other than the Food Service Equipment Contractor).
- **E.** Legs: Cabinet legs shall be of stainless steel with adjustable stainless steel feet, Welded to counter support.
- **F.** Hardware: The following hardware is specified to establish the desired design and level of quality. Alternative manufacturers of equivalent products may be used. Fabricator shall utilize the correct

quantity and spacing of hardware items as recommended by the specific manufacturers:

- 1. Door Hinges: Adjustable Tension Concealed Hinge, 125 degree opening, US26D finish.
- 2. Door Locks: HAFELE Inlaid Lock, US26D finish.
- 3. Door Catch: Adjustable heavy duty tension chrome plated catch, Component Hardware model M27-2490 or approved equal. Provide non-magnetic type.
- **G. Shelves:** Provide shelving per section 2.16 of these specifications.

2.15 CABINETS - BASE UNITS; MILLWORK CONSTRUCTION

- **A. Construction Standards:** All casework to be constructed to standard indicated in section 1.09-G of these specifications. All casework to be plastic laminate construction, unless otherwise noted. All plastic laminate cabinets are to be one color, unless otherwise noted. All cabinets shall utilize flush overlay construction.
- **B.** Countertops: All countertops to be plastic laminate (different color from cabinets), unless noted otherwise. Provide 1-1/2" shelf edge, and 4" high splash at all back and side walls. All Corian to be FOUNTAINHEAD or Laminate to be FORMICA 2000 countertops to be constructed to sizes and profiles shown utilizing standard colors and finishes; provide fusion seaming.
- **C. Support:** All cabinets having a clear span below, shall be capable of sustaining a 300-pound load at the front edge of the counter at midspan.
- **D. Base:** All cabinet bases shall be mounted on 12 gauge galvanized steel channel. All base cabinets shall have a 6" high toe space. The finish base applied thereto shall be the same base as in the rest of the room, and shall be applied thereto by that respective contractor, other than the Food Service Equipment Contractor.
- **E. Hardware:** The following casework hardware is specified to establish the desired design and level of quality. Alternative manufacturers of equivalent products may be used. Casework fabricator shall utilize the correct quantity and spacing of hardware items as recommended by the specific manufacturers:
 - 1. Door Hinges: BLUM Premium Concealed Hinge, 125 degree opening, US26D finish or equal
 - 2. Door Locks: HAFELE Inlaid Lock, US26D finish or equal
 - 3. Adjustable Shelf Brackets and Standards: KV Recessed Pilaster and Supports, US26D finish or equal.
 - 4. Door Catch: Adjustable heavy duty tension chrome plated catch, Component Hardware model M27-2490 or approved equal.. Provide non magnetic type.

2.16 UNDERSHELVING (METAL)

If under shelving is not specified provide all tables, dish tables and sinks with tubular undershelves running the full length of unit.

A. Stationary Shelving: Stationary shelving under open base tables shall set approximately 8" above the floor with all edges rolled down on a 3/4" radius approximately 1-3/4". The profile of these shelves shall match metal edge profile No. 1. Where shelving intersects the leg, the joint shall be formed without openings. The shelving shall be attached by welding the underside. Where shelving abuts walls, turn edge up 2", round corners and finish smooth. Shelving shall be 16 gauge stainless steel.

- **B. Removable shelving:** Removable shelving under open base tables will be supported on 1-1/4" stainless steel tubing. The resulting shelving shall be rolled down over the rails in maximum 20" wide sections. Where shelving abuts walls, turn edge up 2", round corners and finish smooth. Shelves shall be turned down 90° square where the resulting sections abut one another. Shelving shall be 18 gauge stainless steel.
- **C. Tubular Shelves:** Tubular shelving under open base tables will be set approximately 8" above the floor on 6" centers, where shelving intersects the leg or a cross brace it shall be fully welded and polished smooth, the joint shall be formed without openings.
- **D. Enclosed Shelving:** Enclosed cabinet shelving shall be of 18 gauge stainless steel, back and ends turned up 1-1/2" against body panels and spot welded. Front edge shall be turned down 1-1/2" and returned ½" on 75° angle on intermediate shelf. Lower shelf to be turned down 1-1/2" on front and 1" on back.
- **E. Enclosed Shelving, Construction:** Enclosed cabinet removable shelving shall be made in maximum 20" wide sections having all edges flanged down 1-1/2". The corners of these shelves shall be left open so as to provide an easy to clean corner. Heated cabinet shelves shall be perforated with ½" diameter holes spaced on 3" centers. These shelves shall be removable and supported on angle framework as specified.
- **F. Elevated Shelving:** Elevated Shelving 12" wide or less shall be of 16 gauge stainless steel or 14 gauge stainless steel in widths greater than 12". The front and ends shall be rolled down on a 3/4" radius 1-1/2" diameter roll approximately 180°. This shall be metal edge profile No. 3. Where shelves are up against the wall or adjacent to fixtures, the edges shall be turned up 1-1/2". All flanges shall be coved on a minimum 1/8" radius with the intersecting turned up flanges at the back and ends also coved. The corners shall be welded, ground, and polished to form a fillet of the same radius as other bends.
- **G. Table Mounted Shelves:** Table mounted shelves shall be supported from the top of the fixtures on 1-1/4" o.d. diameter stainless steel tubular uprights attached to the shelving with stainless steel ferruled plates and/or stainless steel triangular brackets. The feruled plates shall be spot welded to the underside of the shelves and the stainless steel brackets shall be attached with stainless steel studs, lock washers, and acorn nuts. Tubular supports shall be attached to the counter top without visible bolts and/or screws. It is extremely important that on dish tables the supports be located so as not to be placed in working areas. Supports on dish tables shall be extended through the return of the backsplash to a bracket below the working surface of the table. This bracket, whenever possible, shall be bracketed to an existing table leg.

2.17 WALL SHELVING

A. Stainless Steel Wall Mounted Shelves: Wall mounted shelves shall be supported on #14 gauge stainless steel cantilever type brackets. These brackets shall be steady and shall be provided with two holes for securely anchoring to the masonry at the job site. Triangular shapes brackets shall be attached to the underside of the shelf with studs, lock washers, and chrome plated acorn nuts.

2.18 PROTECTOR CASES

- **A. Protector Cases:** Protector case shall be of the size shown on plan and shall be approved by SAGINAW PUBLIC SCHOOLS and Health Department codes and standards.
- **B.** Top shelf: When specified as stainless top shelf shall be 16 gauge stainless steel serving shelf with the front being formed down on a slope to match the slope of the front glass and bracket. The rear and ends of the serving shelf to be turned down 1-3/4" on a 90° angle.

- **C. Uprights:** Shelf shall be mounted on 16 gauge round stainless steel uprights unless otherwise specified. The uprights will be designed so as to be adjustable up-down 8", in a concealed manner without visible means of attachment.
- **D.** Glass units: Adjustable Dual-Service Sneeze Guard, single sided guard with top shelf, tempered glass with polished edges, adjustable end panels, table mount, 1" OD round stainless support posts, NSF & cULus Listed
- **E.** Lights: Where lights are specified under the item, a base mounted switch will be provided. This switch shall be mounted in a recessed stainless steel pan, located on or in counter as directed by SAGINAW PUBLIC SCHOOLS. A ballast and ballast box shall be provided in the base of the counter as required.
- **F. Heat Lamps:** Where heat lamps are specified under the item, remote infinite controls will be provided. These controls shall be mounted in a recessed stainless steel pan, located on or in counter as directed by SAGINAW PUBLIC SCHOOLS. A ballast and ballast box shall be provided in the base of the counter as required.

2.19 DRAWERS

- **A. Construction:** All drawers shall be 18 gauge stainless steel body measuring 20" x 20" x 5" deep, or of size called for in Item Specifications.
- **B.** Insert: Drawer pan insert shall be constructed of stainless steel and die-stamped with bottom corners rolled on a 1" radius and vertical corners rounded on a 2" radius, removable with-out the use of tools, measuring 20" x 20" x 5" deep, or of size called for in Item Specifications.
- **C. Slides:** #14 gauge stainless steel channel type slides formed with nylon tired ball bearing rollers. Slide shall be of telescoping channels with a minimum of four rollers per pair. Slide shall be welded to the drawer face and cross bracing forming a cradle to accept the removable drawer body. This slide shall be pitched to allow the drawer to close via gravity. Complete drawer frame and slide assembly will be removable for cleaning.
- **D. Fronts and pulls:** Fronts or Face shall be double pan construction shaped of 16 gauge stainless steel having all sides turned back with the corners welded. The face shall be supplied with a stainless steel recessed grip with hand pull, chrome plated pull. Double panel faces will be sound deadened and insulated. Front shall be attached to drawer body with brackets.
- **E. Locks:** Locks will be supplied as specified in item specifications. Locks shall be of sufficient strength to prevent unauthorized entry into the locked space. Locks shall be of the key and cylinder type with tamper-proof mechanisms. Furnish SAGINAW PUBLIC SCHOOLS with three (3) sets of keys to each lock at the conclusion of the project, accurately labeled and turned over to the SAGINAW PUBLIC SCHOOLS all at one point in time.
- **F. Bumpers and Stops:** All drawers shall have rubber bumpers for quiet operation and shall have positive stops to prevent accidental withdrawal.

2.20 WORK TABLE TOPS - WOOD; CUTTING BOARDS

A. Wood Work Table Tops: Wood tops shall be of the highest quality northern grown hard rock maple. Thickness shall be as specified. Tops shall be constructed of selected strips of edge grain maple electronically bonded to exact dimension with one clear finely finished face. Hardwood curbs or riser to be supplied with 1" radius cove.

- **B.** Cutting Boards, "Richlite": When "Richlite" cutting surfaces are specified, cutting boards will be N.S.F. approved phenolic fiber laminate tops under the trademark "Richlite." Coved risers are ½" thick with a ½" radius cove. Standard height of risers is 4".
- **C. Cutting Boards:** N.S.F approved thermoplastic tops and cutting boards can be used in areas where cutting or carving surfaces are required. Material shall not warp, crack, bend, chip or peel. Material shall be high density polyethylene; pure natural polypropylene; copolymer natural polypropylene. Material shall be acceptable to N.S.F., U.S.D.A & F.D.A. specifications.

2.21 REFRIGERATED BASES

A. Controls: F.E.C. shall provide all switches, controls, valves, thermostats and all necessary hardware for a complete system.

2.22 FOOD WARMERS

- A. Heating Wells: When waterless wells are not used then electric food warmers consist of the number of wells as shown on plan. Heating wells shall be of one piece die-stamped heavy gauge type 302 stainless steel. Wells shall be heated with 1600 watt stainless steel heating element connected to a thermostat equipped with an off position. Each well shall have a pilot light indication when the well is on. Food warmers shall be installed the counter top having a die-formed headed edge which shall flange down into the food well and be attached with stainless steel flat head screws. The joint between the counter top and the food well shall be sealed with high temperature sealastic to prevent any escape of vapors.
- **B. Food Well Controls:** Food well controls shall be mounted on the operator's side of the counter or shall be mounted in a stainless steel recessed panel below the plate shelf as required per item specifications. Food warmers are to be supplied in 115-208-230 volt electrical characteristics. Food wells are to be completely interwired terminating in two or three leads. Wire sizes shall be as specified and required under the National Electric Code.

END OF GENERAL SECTION

2.25 ITEM SPECIFICATIONS:

Note: All serving counters to be 34" AFF to meet ADA

F.E.C. to provide a price for the following items:

ITEM 1 - SERVING COUNTER, HOT FOOD (1 REQ'D)

Duke Manufacturing Model TST-74PG Dimensions: 36(h) x 74(w) x 32(d)

Thurmaduke™ Solid Top Unit, mobile utility counter, 74"W x 32"D x 36"H, 16ga stainless steel top, 20ga paint grip steel body & undershelves, 5" dia. gray poly swivel casters & brakes, NSF

1 ea Stone Gray powder coat paint finish

1 ea 14ga stainless steel top, in lieu of standard

1 ea	Extend width of top up to 12", for a 44" or less overall top, with stainless steel fixed brackets
	40" top, extend top on customer's side 8" in lieu of tray slides.
1 ea	Internal Locking Device (on both ends), stainless steel pin & latch line up device under countertop, per unit price (Note: Units required to be portable)
1 ea	Veneer plastic laminate on body (NOTE: Manufacturer's standard colors ONLY, metallics, color-core & raised textures may incur additional cost)
1 ea	Veneer on customer's side
1 ea	Veneer on end, each
	Customer's right side
1 ea	10 ft. cord & plug
1 ea	Special height unit - AD *34" height*
1 ea	Sliding doors, with lock and keys, paint grip steel, recessed stainless steel pull
1 ea	Kick Plate, customer's side, stainless steel, recessed, screw attached, 1/2" above
	floor for easy rolling
1 ea	Kick Plate, end, stainless steel, recessed, screw attached, 1/2" above floor for
	easy rolling
	Customer's right side
1 ea	For special height rail - for mounting control boards
1 ea	Rectangular cutout with raw edge, must be 12" or less, in counter top, body panel or a shelf (specify cutout size & location)
1 ea	Rectangular cutout with reinforced edges, in counter top, body panel or a shelf, counter top max. right to left is 4" less than unit length (specify cutout size & location)
1 ea	CUSTOM Electric inter connect box with outlets breakers and cord, mounted in the base
	(2) Duplex NEMA 6-20R for heat wells
	(1) Simplex NEMA 5-15R for overhead LED
	(1) Simplex NEMA 5-15R for overhead Heater
1 ea	Remote switch for Lighting on/off
1 ea	Dealer supplied, shipped to duke and factory installed guards

ITEM 1.1 - HOT FOOD WELL UNIT, DROP-IN, ELECTRIC (1 REQ'D)

Duke Manufacturing Model WW-4 Dimensions: 10.3(h) x 61.25(w) x 23.5(d)

Waterless Hot Food Well Drop-In Unit, electric, dry operation, with (4) 12" x 20" hot food well, 61-1/4"W x 23-1/2"D x 10.3"H, stainless steel well, removable FDA approved black silicone rubber liner, fully insulated galvanized exterior housing, touch screen control panel, (3) preset temperatures, Wi-Fi enabled, without drain, 72" control wire, includes spacing rim, UL EPH Classified, cULus

1 ea 208v/60/1-ph, 9.6 amps, (4) NEMA 6-20P

ITEM 1.2 - SNEEZE GUARD, STATIONARY (1 REQ'D)

Premier Metal & Glass Model TM2N-A Dimensions: 20.75(h) x 16.25(d)

CHOICE™ Adjustable Dual-Service Sneeze Guard, single sided guard with top shelf, tempered glass with polished edges, adjustable end panels, table mount, 1" OD round stainless support posts, NSF & cULus Listed

1 ea	Specify Length:74"
1 ea	1" OD Stainless Steel tubing
1 ea	Both end panels, standard
1 ea	Ultra-Slim LED display light 4000k (Std.)

ITEM 1A - SERVING COUNTER, UTILITY (1 REQ'D)

Duke Manufacturing Model TTU-90PG Dimensions: 36(h) x 31(w) x 32(d)

Thurmaduke™ Triangle Unit, 90° corner, mobile, 32" triangle, 36"H, 16ga stainless steel top, 20ga paint grip steel enclosed body, 5" dia. gray poly swivel casters & brakes, NSF 1 ea Stone Grav powder coat paint finish 1 ea 14ga stainless steel top, in lieu of standard Extend width of top up to 12", for a 44" or less overall top, with stainless steel 1 ea fixed brackets 40" top, extend top on customer's side 8" in lieu of tray slides. 1 ea Internal Locking Device (on both ends), stainless steel pin & latch line up device under countertop, per unit price (Note: Units required to be portable) Veneer plastic laminate on body (NOTE: Manufacturer's standard colors ONLY, 1 ea metallics, color-core & raised textures may incur additional cost) 1 ea Veneer on customer's side Round cutout with grommet, in counter top, body panel or a shelf (specify cutout 1 ea diameter & location) Special height unit - ADA *34" height* 1 ea 1 ea Kick Plate, customer's side, stainless steel, recessed, screw attached, 1/2" above floor for easy rolling 2 ea Filler panel for special length, mounted on end, enclosed both sides & end, includes longer counter top, longer tray slide if needed, no other equipment in filler 2 ea with 8" body filler panel

ITEM 2 - SERVING COUNTER, COLD FOOD (1 REQ'D)

Duke Manufacturing Model TCM-60PG Dimensions: 36(h) x 60(w) x 32(d)

Thurmaduke™ Cold Food Unit, mobile, 60"W x 32"D x 36"H, 16ga stainless steel top, 5" deep stainless steel mechanical cold pan, 54" x 20" pan, 1" drain line & valve, 20ga paint grip steel body & undershelf, 5" dia. swivel casters & brakes, R448a, 120v/60/1-ph, 5.15 amps, NEMA 5-15P, cULus, UL EPH Classified

TOF, COLUS, OL	LETT Classified
1 ea	Stone Gray powder coat paint finish
1 ea	8" deep cold pan liner in lieu of standard 5" liner
1 ea	Condensate evaporator
1 ea	14ga stainless steel top, in lieu of standard
1 ea	Extend width of top up to 12", for a 44" or less overall top, with stainless steel fixed brackets
	40" top, extend top on customer's side 8" in lieu of tray slides.
1 ea	Internal Locking Device (on both ends), stainless steel pin & latch line up device under countertop, per unit price (Note: Units required to be portable)
1 ea	Veneer plastic laminate on body (NOTE: Manufacturer's standard colors ONLY, metallics, color-core & raised textures may incur additional cost)
1 ea	Veneer on customer's side
1 ea	Veneer on end, each *Customer's left side*
1 ea	10 ft. cord & plug
1 ea	Electric outlet, mounted in base, with galvanized junction box, duplex or single receptacle & stainless steel cover, wired to existing power source
1 ea	Special height unit – ADA 34"
1 ea	Sliding doors, with lock and keys, paint grip steel, recessed stainless steel pull, compressor compartment on operator's side, dry storage partitioned on operator's left, louvered grill with magnetic catches on the right
1 ea	Kick Plate, customer's side, stainless steel, recessed, screw attached, 1/2" above floor for easy rolling
1 ea	Kick Plate, end, stainless steel, recessed, screw attached, 1/2" above floor for easy rolling

Dealer supplied, shipped to duke and factory installed guards

1 ea

ITEM 2.1 - SNEEZE GUARD, STATIONARY (1 REQ'D)

Premier Metal & Glass Model TM2N-A Dimensions: 20.75(h) x 16.25(d)

CHOICE™ Adjustable Dual-Service Sneeze Guard, single sided guard with top shelf, tempered glass with polished edges, adjustable end panels, table mount, 1" OD round stainless support posts, NSF & cULus Listed

1 ea Specify Length: ____60"___
1 ea 1" OD Stainless Steel tubing
1 ea Both end panels, standard

1 ea Ultra-Slim LED display light 4000k (Std.)

ITEM 3 - MILK COOLER (1 REQ'D)

Continental Refrigerator Model MC5NDCW Dimensions: 41.5(h) x 58(w) x 33(d)

Milk Cooler, 58" long, dual access, cold wall cooling, (16) 13" x 13" x 11" or (10) 19" x 13" x 11" crate capacity, stainless steel top, lids & doors, door cylinder security locks, electronic control with digital display, hi-low alarm, hi/low temperature alarm, white finished steel exterior body, galvanized interior with reinforced stainless steel floor, floor drain, (4) 5" swivel casters with front locking brakes, 1/3 HP, cETLus, NSF, Made in USA

1 ea Standard warranty (for the United States & Canada Only): 3 year parts and labor;

additional 2 year compressor part

1 ea 115v/60/1-ph, 5.6 amps, cord, NEMA 5-15P, standard

ITEM 4 - SERVING COUNTER, HOT/COLD/FREEZE CONVERTIBLE (1 REQ'D)

Duke Manufacturing Model TST-88PG Dimensions: 36(h) x 88(w) x 32(d)

Thurmaduke™ Solid Top Unit, mobile utility counter, 88"W x 32"D x 36"H, 16ga stainless steel top, 20ga paint grip steel body & undershelves, 5" dia. gray poly swivel casters & brakes, NSF

1 ea Powder Coat color to be determined

1 ea 14ga stainless steel top, in lieu of standard

1 ea Extend width of top up to 12", for a 44" or less overall top, with stainless steel

fixed brackets

40" top, extend top on customer's side 8" in lieu of tray slides.

1 ea Internal Locking Device (on both ends), stainless steel pin & latch line up device

under countertop, per unit price (Note: Units required to be portable)

1 ea Veneer plastic laminate on body (NOTE: Manufacturer's standard colors ONLY.

metallics, color-core & raised textures may incur additional cost)

1 ea Veneer on customer's side

1 ea Veneer on end, each

1 ea 10 ft. cord & plug

1 ea Special height unit – ADA *34"*

1 ea Special rail for mounting of controls

1 ea Rectangular cutout with raw edge – located on front rail to mount controls

1 ea Rectangular cutout with reinforced edges, in counter top, for install of item 4.1

1 ea Kick Plate, customer's side, stainless steel, recessed, screw attached, 1/2" above

floor for easy rolling

1 ea Kick Plate, end, stainless steel, recessed, screw attached, 1/2" above floor for

easy rolling

1 ea CUSTOM Electric inter connect box with outlets breakers and cord, mounted in

the base

(2) Duplex NEMA 6-20R for heat wells

(1) Simplex Nema 5-15R for overheard LED

1 ea Dealer supplied, shipped to duke and factory installed guards

ITEM 4.1 - HOT / COLD FOOD WELL UNIT, DROP-IN, ELECTRIC (1 REQ'D)

Duke Manufacturing Model HCF-5 Dimensions: 25.94(h) x 80.19(w) x 25.5(d)

Hot/Cold/Freeze Drop-In Food Well Unit, heated & refrigerated, 80" long, (5) 12" x 20" individual pans, 300 series stainless steel top rim, 5" deep 300 series stainless steel interior liners, steel exterior housing, individual wired remote digital controls for hot or cold operation, air-cooled condensing unit, individual drains manifolded to a valve, 6' cord & plug NEMA #14-30P, 208 volt, 60 hrz, 1 phase, 18 amps, UL, cULus, NSF #4 & 7

1 ea 120v/60/1-ph, 28.0 amps, NEMA 5-50P

ITEM 4.2 - SNEEZE GUARD, STATIONARY (1 REQ'D)

Premier Metal & Glass Model TM2N-A Dimensions: 20.75(h) x 16.25(d)

CHOICE™ Adjustable Dual-Service Sneeze Guard, single sided guard with top shelf, tempered glass with polished edges, adjustable end panels, table mount, 1" OD round stainless support posts, NSF & cULus Listed

1 ea Specify Length: _____88"____ 1 ea Both end panels, standard

1 ea Ultra-Slim LED display light 4000k (Std.)

ITEM 5 - CASH REGISTER STAND (1 REQ'D)

Duke Manufacturing Model TCS-30PG Dimensions: 36(h) x 30(w) x 32(d)

Thurmaduke™ Cashier Stand, mobile, 30"W, 32"D, 36"H, 16ga stainless top, 20ga paint grip steel body & partial undershelf, stainless steel tube foot rest, 5" dia. gray poly swivel casters & brakes, NSF

1 ea Stone Gray powder coat paint finish

1 ea Stainless steel drawer, with lock and keys, for cashier stand

1 ea 14ga stainless steel top, in lieu of standard

1 ea Extend width of top up to 12", for a 44" or less overall top, with stainless steel

fixed brackets

44" wide top, an additional 6" on the left and right side of unit

1 ea Veneer plastic laminate on body (NOTE: Manufacturer's standard colors ONLY,

metallics, color-core & raised textures may incur additional cost)

1 ea Veneer on cashier's left1 ea Veneer on cashier's right

1 ea Veneer opposite the cashier

1 ea 10 ft. cord & plug

1 ea Electric outlet, mounted in base, with galvanized junction box, duplex or single

receptacle & stainless steel cover, wired to existing power source

1 ea Special height unit – ADA *34"*

1 ea Kick Plate, cashier's left, stainless steel, recessed, screw attached, 1/2" above

floor for easy rolling

1 ea Kick Plate, cashier's right, stainless steel, recessed, screw attached, 1/2" above

floor for easy rolling

1 ea Kick Plate, opposite cashier, stainless steel, recessed, screw attached, 1/2"

above floor for easy rolling

ITEM 6 - MOBILE HEATED CABINET (3 REQ'D)

Cres Cor Model H137SUA12D Dimensions: 73(h) x 28.75(w) x 32.75(d)

Cabinet, Mobile Heated, insulated, top-mount heater assembly, recessed push/pull handles, magnetic latch, (12) sets chrome plated wire universal angle slides for 12" x 20" thru 18" x 26" pans on 4-1/2" centers, adjustable 1-1/2" centers, reversible dutch doors, (4) heavy duty 5" swivel casters (2) braked, anti-microbial latches, stainless steel construction, NSF, cCSAus, ENERGY STAR®

3 ea Standard Warranty: 1 year labor with 3 year parts warranty

3 ea 120v/60/1-ph, 1.5 kW, 12.0 amp, 10 ft power cord, NEMA 5-15P, standard

3 ea Right-hand door swing (top & bottom doors), standard

3 ea Cord Wrap for insulated cabinet, standard

3 ea Perimeter Bumper, add 2" to OA dimensions, non-marking, gray

ITEM 7 - PLASTIC SHELVING UNIT (1 REQ'D)

Quantum Model QP243674VS-4 Dimensions: 74(h) x 36(w) x 24(d)

Millenia Shelving Unit, 36"W x 24"D x 74"H, 2000 lbs load capacity, includes: (4) open grid shelves with removable shelf mats and (4) posts, all polymer, rust proof, gray finish, NSF, Made in USA

1 ea Lifetime limited warranty (limited against rust and corrosion)

ITEM 8 - SHELVING, WALL MOUNTED (1 LOT)

Titan Stainless Model

1 ea 3WMS-14 Dimensions: 12(h) x 36(w) x 14(d)

Shelf, wall mounted, 36"W x 14"D, 2" rear up turn, 16/300 stainless steel

construction, NSF

1 ea Shelf, wall mounted, 48"W x 14"D, 2" rear up turn, 16/300 stainless steel

construction, NSF

ITEM 9 - SOILED DISHTABLE (1 REQ'D)

Titan Stainless Model 6SDT-R-14 Dimensions: 43(h) x 72(w) x 30(d)

Soiled Dishtable, straight design, 72"W, right to left operation, 20" x 20" x 8"D pre-rinse sink, 14/300 stainless steel top, stainless steel H-frame legs, NSF

1 ea Disposer Cone Package, includes: disposer cone weldment, vacuum breaker

holes & disposer control panel (Disposer cone provided by others)

1 ea Rack Slide, 16/300 stainless steel construction 6 ft Sound Deadening (priced per linear foot)

ITEM 10 - DISPOSER (1 REQ'D)

Salvajor Model 200-CA-18-ARSS

Disposer, 18" cone assembly, 2 Hp motor, start/stop push button, drain/flush/time delay, automatic reversing & water saving ARSS control, includes fixed nozzle, chrome plated vacuum breaker, solenoid valve, scrap ring & flow control, 6-1/2" inlet diameter, heat treated aluminum alloy housing, UL, CSA, CE

1 ea 208v/60/1-ph, 12.1 amps

1 ea Mounting bracket for ARSS-2, ARSS,

ITEM 10.1 - PRE-RINSE FAUCET ASSEMBLY, WITH ADD ON FAUCET (1 REQ'D)

Krowne Model 17-109WL Dimensions: 38(h)

Krowne Royal Series, pre-rinse Assembly, with add-on faucet, wall mount, 8" centers, spring action flexible gooseneck, 38"H stainless steel hose with 15" overhang & 1.2 GPM spray head, built in check valves, 2.0 GPM add-on faucet with 12" swing spout, quarter-turn ceramic cartridge valves, includes wall bracket & mounting kit, chrome plated brass base, low lead compliant, includes internal check valves to prevent backflow & cross contamination, NSF (interchangeable with most brands) (ships pre-assembled)

1 ea 3 year warranty, standard

ITEM 11 - DISHWASHER, DOOR TYPE (1 REQ'D)

Hobart Model AM16T-BAS-2

Dishwasher, door type, tall chamber (27"), high temp sanitizing, 208-240/60/3 (field convertible to single phase), 60 racks/hour, straight-thru or corner, user-friendly smart touchscreen controls, Sense-A-Temp™ booster, electric tank heat, pumped rinse, pumped drain, auto-fill, stainless steel tank, frame, doors & feet, sheet pan rack, cULus, NSF, ENERGY STAR®

1 ea Standard warranty - 1-Year parts, labor & travel time during normal working

hours within the USA

1 ea Startup by Factory Trained Technician - Confirmation of correct machine and utility installation; performance check to ensure machine is operating to factory specifications; adjustments as needed, and customer demo. For installations within 100 miles of a Hobart Service Office during normal business hours with appropriate notice; beyond 100 miles contact Hobart Service. See Hobart

Service for complete details

ITEM 12 - Dishmachine Ventilation System (1 REQ'D)

MANUFACTURER: Vent-Tech (248) 200-2846

- 1) Sized to properly ventilate the dishmachine.
- 2) Unit shall be constructed of 16 gauge stainless steel.
- Unit to be all welded construction with smooth angles and ground and polished joints.
- 4) Provide and install exhaust fan, stainless steel curb and all ductwork
- 5) Install where shown on drawings.
- Unit must meet dishmachine manufacturers dimensional and performance requirements for this item.
- Provide condensate drip pan as shown on detail drawing.
- 8) Provide stainless steel trim at ceiling if required.
- 9) Coordinate installation of this item with other trades.
- 10) E.C. to provide all parts and labor necessary to interwire roof top exhaust fan to lighted wall switch per plan.
- 11) F.E.C. to provide drain tubing to floor drain.

ALTERNATES: None

ITEM 13 - CLEAN DISHTABLE (1 REQ'D)

Titan Stainless Model 6CDT-R-14 Dimensions: 43(h) x 72(w) x 30(d)

Clean Dishtable, straight design, 72"W, left to right operation, 14/300 stainless steel top, stainless steel H-frame legs, NSF

6 ft Sound Deadening (priced per linear foot)

ITEM 14 - PLASTIC SHELVING UNIT (1 REQ'D)

Quantum Model QP245474VS-4 Dimensions: 74(h) x 54(w) x 24(d)

Millenia Shelving Unit, 54"W x 24"D x 74"H, 2000 lbs load capacity, includes: (4) open grid shelves with removable shelf mats, (4) posts and dunnage stand, all polymer, rust proof, gray finish, NSF, Made in USA

1 ea Lifetime limited warranty (limited against rust and corrosion)

8 ea PRONGED DRYING RACK 1-1/2in SPACING

12" width

ITEM 15 - SINK, HAND (2 REQ'D)

Custom Model CUSTOM

Existing hand sink

ITEM 16 - WORK TABLE, STAINLESS STEEL TOP (2 REQ'D)

Duke Manufacturing Model 314S-3084 Dimensions: 36(h) x 84(w) x 30(d)

Work Table, stainless steel top, 30" wide top, without splash, 84" long, with stainless steel undershelf & posts, 36" high, 14/300 stainless steel, NSF

2 ea Standard Drawer, stainless steel, with stainless steel face plate, on roller slides

(when ordered separately, specify width of table), for Work Tables, NSF

8 ea Special height legs, for Work Tables...per leg

8 ea Casters, 5" diameter, swivel type with lock, for Work Tables, each (tables with (4)

casters, will have (2) with brakes; tables with (6) casters, will have (3) with

brakes)

Unit to be 34" AFF for ADA compliance

ITEM 16.1 - CAN OPENER (1 REQ'D)

Edlund Model 1S

Can Opener, manual, #1™ with stainless steel base (for cans up to 11" tall) "Old Reliable"™

1 ea 1 year limited warranty, standard

Installed by dealer on one of the item 16

ITEM 17 - HAND SINK (1 REQ'D)

Krowne Model HS-2L Dimensions: 13.38(h) x 15.75(w) x 15.25(d)

Hand Sink, wall mount, 15-3/4"W x 15-1/4"D x 13-3/8"H OA, 7-3/4"H backsplash, 12-1/2" wide x 9-3/4" front-to-back x 5-5/8" deep bowl, 4" OC splash mount gooseneck faucet (low lead

compliant), includes mounting bracket, stainless steel construction, NSF

1 ea Krowne Royal Series E-Z Install Water Line Kit, wall mount, 22" long

ITEM 18 - SINK, (3) THREE COMPARTMENT (1 REQ'D)

Custom Model CUSTOM Existing 3-compartment sink

ITEM 19 - REACH-IN REFRIGERATOR (3 REQ'D)

Continental Refrigerator Model 3RN Dimensions: 82.25(h) x 78(w) x 35.38(d)

Refrigerator, reach-in, three-section, self-contained refrigeration, stainless steel front, aluminum interior & ends, standard depth, full-height solid doors, cylinder locks, electronic control with digital display, hi-low alarm, unit comes standard with expansion valve, electric condensate evaporator, R290 Hydrocarbon refrigerant, 1/2 HP, cETLus, NSF, Made in USA, ENERGY STAR®

3 ea Standard warranty (for the United States & Canada Only): 3 year parts and labor;

additional 4 year compressor part

3 ea 115v/60/1-ph, 8.5 amps, cord, NEMA 5-15P, standard

3 ea Left Door hinged on left, center & right doors hinged on right, standard

3 ea 5" Casters, standard

ITEM 20 - REACH-IN FREEZER (3 REQ'D)

Continental Refrigerator Model 3FN Dimensions: 82.25(h) x 78(w) x 35.38(d)

Freezer, reach-in, three-section, self-contained refrigeration, stainless steel front, aluminum interior & ends, standard depth, full-height solid doors, cylinder locks, electronic control with digital display, hi-low alarm, electric condensate evaporator, 1 HP, cETLus, NSF, Made in USA

3 ea Standard warranty (for the United States & Canada Only): 3 year parts and labor;

additional 2 year compressor part

3 ea 115v/208-230v/60/1-ph, 11.6 amps, cord & plug supplied by others, standard

3 ea 5" Casters, standard

ITEM 21 A&B Hood & Ventilation System (1 REQ'D)

MANUFACTURER: Vent-Tech (248)200-2846

- All exterior surfaces of exhaust canopy shall be constructed of 18 gauge 304 stainless steel
- 2) Interior of hood shall be constructed of 18 gauge 304 stainless steel.
- Construction of hood shall be in accordance with NFPA 96 requirements.
- 4) Hood to be provided with UL listed incandecent lights, pre-wired to J-box by manufacturer, quantity as listed on detail drawing. Bulbs to be provided by owner.
- 5) Hood shall be shaped as shown on plan. Multiple section hoods must be provided with an open capture area.
- Foodservice Equipment Contractor shall coordinate installation of proper structural, architectural and mechanical details of this item with their own work.
- 7) It is the intent of this specification that the Foodservice Equipment Contractor will supply and physically install a complete ventilation system; properly installed, fully operational, and in compliance with all State, Local and City Building, Fire and Health codes. Mechanical Contractor to provide and install all parts & piping required for gas connection.
- 8) System will be provided with, but not limited to, the following: ventilator hood(s), duct collars, fans and starters, curbs, MUA furnace, duct, duct insulation, and disconnects.
- 9) All seams and joints are to heli-arc welded, ground and polished to blend with the base metal. Weld metals are to be of same composition as base metal.
- 10) Caulk hood to wall(s) to seal all gaps.
- 11) Hood to be provided with structural hanging brackets; factory welded.
- 12) Foodservice Equipment Contractor is to provide all necessary threaded rods, brackets and all hardware required to hang hood where shown on plan.
- 13) All ventilation controls shall be located in face of hood.
- 14) Location of J-boxes for control wiring and lighting shall be closely coordinated with other contractors so that all J-boxes are accessible after project construction is complete.
- 15) Provide with *stainless steel* baffle-type grease extractors, UL listed and easily removable for cleaning without the use of tools.

- Two (2) weeks prior to foodservice inspection, Foodservice Equipment Contractor shall provide a complete certified statement of balance. Statement shall indicate static pressure across hood, State Certification of entire hood system as-built, CFM exhausted and supply CFM. Foodservice Equipment Contractor shall send additional copies of this report to Randolph/Lang Associates, State and Local Health Departments, Fire Marshal and Architect.
- 17) Hood shall be bottom and front-discharge type with built-in exhaust and supply air collars.
- 18) Foodservice Equipment Contractor will carefully inspect the architectural and mechanical drawings, and make visits to the site as the project proceeds to make certain that the hood and ductwork design is coordinated so as not to impede the progress of the project, that ducts and all planned collar and make-up air unit connections can be made within the planned spaces and mechanical chases provided for the system.
- 19) Ductwork is provided as a part of this item. Ductwork will be constructed and installed per NFPA 96, and shall be provided with clean-outs as required by all applicable codes. Foodservice Equipment Contractor will closely coordinate the location of the cleanouts and damper access panels with other trades and the Architect so that ceiling and wall access panels can be planned.
- 20) Ductwork: Exhaust duct shall be 400 series 18 gauge stainless steel with fully welded seams, and shall be liquid-tight. Supply duct shall be 18 gauge aluminized steel with stitch welded seams. All duct shall be approved for this use by applicable agencies.
- 21) Painting of exposed rooftop ventilation system equipment including exhaust fan, curbs and equipment rails shall be by Foodservice Equipment Contractor. Paint shall be epoxy based and shall be applied over a primer approved for use with such paint in accordance with the manufacturers instructions.
- 22) Color is to be Slate Gray, unless otherwise specified by the Architect.
- 23) All exterior ductwork to be insulated and weatherproofed.
 Furthermore, all exterior duct runs and shrouds shall have breaks on exposed sides and top.
- 24) Ventilator fan to be manufactured by Penn (Philadelphia-PA) or equal and shall have a sone rating medium or less.
- 25) Fan to be sized so that the entire ventilation system can be balanced and operated in accordance with all applicable codes. Provide grease collection devices installed on all exhaust fans.
- 26) Curb(s) and equipment rails shall be prefabricated and sized for fan and proper ductwork. Pitch curbs and equipment rails to match roof deck. Provide internal vibration isolation and caps on equipment rails.
- 27) Make-up air unit to be provided with indirect gas fired furnace.

- 28) Make-up air unit(s) to be designed so that the incoming air grill is 10'0" away from any roof vent or exhaust. System price shall include all
 necessary duct extensions and painted metal supports required for
 rooftop heater, duct and intake. The F.E.C. shall supply base
 supports for all of the rooftop ventilation equipment. These supports
 shall be constructed of aluminized steel and shall be suitable for
 supporting the ventilation equipment. These supports shall be
 provided to the roofing contractor for installation and flashing prior to
 the roof membrane installation. These supports to be painted to
 match roof top equipment.
- 29) Foodservice Equipment Contractor shall advise other trades, within two (2) weeks of this contract, of ventilator configuration, including dimensional and weight information so that other trades can coordinate proper structural, architectural and mechanical details of this item with their own work.
- 30) Provide motorized inlet damper and intake filters in make up air unit.
- 31) Within three (3) weeks of contract award, Foodservice Equipment Contractor to advise other trades of valve, line and load sizes and loose parts provided as a part of this item.
- 32) All hood controls shall be mounted on face of hood in stainless steel enclosure, and shall include a switch for hood lights, switches and pilot lights for fans and furnace, dirty filter light, and supply air temperature controller.
- 33) Within three (3) weeks of contract award, Foodservice Equipment Contractor shall advise other contractors of date of manufacture and delivery of all components of this system. In addition, F.E.C. shall provide the name of the firm installing the system. NOTE: The entire ventilation system must be available for installation on the site no less than 10 weeks prior to facility completion. Failure to meet this requirement will result in a \$100 penalty for every calendar day the system is late.
- 34) Exhaust fan(s) shall be interlocked to make-up air unit(s), and shall be UL listed for grease laden air.
- 35) Verify all utilities and air volumes.
- Make certain that ventilation equipment and hood are delivered to site in time to fit through access passages to kitchen and rooftop.
- Gas fired make-up air units shall be design certified to appropriate ANSI standards.
- 38) Wall behind hood must be a non-combustible or limited combustible wall.
- 39) Provide 18 gauge stainless steel wall panel on wall under entire length & ends of hood. Wall paneling shall be joined together with t-strips and sealed with silicon caulk.

11) F.E.C. to provide closure panels from top of hood to ceiling as required.

ALTERNATES: None

ITEM 22 - RANGE, 36", 6 OPEN BURNERS (1 REQ'D)

Montague Company Model VT26-6 Dimensions: 56.5(h) x 36(w) x 34.69(d)

Technostar Restaurant Range, gas, 36", (6) 30,000 BTU open burners, (1) convection oven base, piezo ignitor (oven only), stainless steel front and sides, porcelain oven bottom and door, 6" high legs, 215,000 BTU, CE

1 ea Natural gas

1 ea 27" deep cooktop, standard

1 st Casters, set of (4)

ITEM 22.1 - GAS CONNECTOR HOSE KIT / ASSEMBLY (1 kt REQ'D)

Krowne Model M7548K12

Royal Series Moveable Gas Connection Kit, 3/4" I.D., 48" long, stainless steel corrugated tubing & radial wrap with green antimicrobial PVC coating, (1) quick disconnect, (2) 360° swivel, (1) full port valve, (2) 90° elbows, restraining cable with mounting hardware, (2) caster positioning chocks with mounting hardware, 180K BTU/hr minimum flow capacity
To be used with item #22

ITEM 23 - CONVECTION OVEN, GAS (1 REQ'D)

Montague Company Model HX2-63A Dimensions: 68(h) x 38.25(w) x 41.25(d)

Vectaire Convection Oven, gas, double-deck, bakery depth, two-speed motor, electronic ignition and solid state controls, stainless steel front, top & sides, 3" high flue deflector with stainless steel front trim, 6" high stainless steel legs, 126,000 BTU, NSF, CSA Star, CSA Flame, ENERGY STAR®

1 ea	Standard war	ranty: one year	parts and	labor warranty
------	--------------	-----------------	-----------	----------------

1 ea Lifetime door warranty, standard

1 ea Natural gas

1 ea (2) 120v/60/1ph, 7.2 amps, 1/2 hp, cord with 3-prong plug

1 ea Manifold assembly 3/4" NPT

1 ea Down draft diverter, stainless steel (for direct venting)

1 ea Casters with 5" wheel 6" OA (set of 4)

ITEM 23.1 - GAS CONNECTOR HOSE KIT / ASSEMBLY (1 kt REQ'D)

Krowne Model M7548K12

Royal Series Moveable Gas Connection Kit, 3/4" I.D., 48" long, stainless steel corrugated tubing & radial wrap with green antimicrobial PVC coating, (1) quick disconnect, (2) 360° swivel, (1) full port valve, (2) 90° elbows, restraining cable with mounting hardware, (2) caster positioning chocks with mounting hardware, 180K BTU/hr minimum flow capacity To be used with item #23

ITEM 24 - COMBI OVEN, GAS (1 REQ'D)

RATIONAL Model EXISTING

District to relocate oven within the district - N.I.C.

ITEM 25 - TILTING SKILLET BRAISING PAN, GAS (1 REQ'D)

Legion Model CSG41-9

Combi-Pan Tilting Skillet, Gas, 40.1-gallon, 10° tilting pan, adjustable thermostat, 1-1/2" draw-off valve, stainless steel lid with actuator-assisted counter balance, stainless steel pan and open frame, flanged front feet, bullet back feet, 132,000 BTU

1 ea	Natural gas, 132,000 BTU
1 ea	120V/60/1-ph, 1.0 amp, std.
1 ea	NOTE: 1.5" compression draw-off valve #T-304 is std.
1 ea	Can Holder, #10, for draw-off
1 ea	Draw-Off Drain, with 6' hose
1 ea	Faucet Bracket Mounted To Unit, for Classic tilting skillets
1 ea	Fill Faucet, single ball valve mounted to frame with 48" stainless steel spray hose assembly
1ea	Skillet Care Kit, includes: 13-1/2" spatula/scraper, draw-off brush, 8" short bristle clean-up brush and three part cooking surface cleaning tool
1 ea	Caster kit, includes (2) locking & non-locking casters & (1) restraining devise kit
1 ea	Add flexible stainless steel gas hose with antimicrobial PVC coating, 3/4" x 60", for use with casters

ITEM 26 - WORK TABLE, WITH PREP SINK(S) (1 REQ'D)

Custom Model CUSTOM

Existing two compartment prep sink with disposer to be relocated per plan

ITEM 27 - NUGGET ICE MAKER (1 REQ'D)

Scotsman Model NS0422A-1 Dimensions: 23(h) x 22.9(w) x 24(d)

Prodigy Plus® Ice Maker, nugget style, Original Chewable Ice®, air-cooled, self-contained condenser, production capacity up to 420 lb/24 hours at 70°/50° (348 lb AHRI certified at 90°/70°), sealed maintenance-free bearings, AutoAlert™ indicating lights, front facing removable air filter, unit specific QR code, stainless auger and evaporator, one-touch cleaning, stainless steel finish, AgION™ antimicrobial protection, R-404A refrigerant, 115v/60/1-ph, 12.9 amps, NSF, cULus, engineered and assembled in USA

COLUS, enginee	ried and assembled in OSA
1 ea	NOTE: Sale of this product must comply with Scotsman's MSRP Policy; contact
	your Scotsman representative for details
1 ea	3 year parts & labor warranties
1 ea	5 year parts on compressor
1 ea	NOTE: Kit(s) required for all modular nugget ice machines placed on a
	dispenser; contact your Scotsman representative for details
1 ea	Ice Bin, top-hinged front-opening door, 370 lb application capacity, for top-
	mounted ice maker, 22" width, metallic finish exterior, toolless removable baffle,
	polyurethane insulation, polyethylene liner, includes 6" legs, NSF, engineered
	and assembled in USA
1 62	3 year parts & Jahor warranties

1 ea 3 year parts & labor warranties

Machine requires hard wired connection or cord set installed in field.

ITEM 27.1 - WATER FILTRATION SYSTEM, FOR MULTIPLE APPLICATIONS (1 REQ'D) Terry Model FF-CP10 Dimensions: 16(h) x 7(w)

Systems IV® Water Filtration System, (1) unit system, 1.5 gpm, 1 micron sediment reduction, 3/8" FNPT standard connection, Fast-Fit cartridges, pressure line gauge, full port shut off valve

ITEM 28 - WORK TABLE, STAINLESS STEEL TOP (1 REQ'D)

Duke Manufacturing Model 314S-3084-2R Dimensions: 36(h) x 84(w) x 30(d)

Work Table, stainless steel top & riser, 30" wide top, with 1-1/8"H riser, 84" long, with stainless steel undershelf & posts, 36" high, 14/300 stainless steel, NSF

Tier of (3) Drawers without top, stainless steel housing & drawers (advise position under top; available on 30" & 36" wide tables only) specify center, left or right position, when ordering, for Work Tables, NSF

4 ea Special height legs, for Work Tables...per leg

4 ea Casters, 5" diameter, swivel type with lock, for Work Tables, each (tables with (4) casters, will have (2) with brakes; tables with (6) casters, will have (3) with brakes)

Unit to be 34" AFF for ADA compliance

ITEM 28.1 - CAN OPENER (1 REQ'D)

Edlund Model 1S

Can Opener, manual, #1™ with stainless steel base (for cans up to 11" tall) "Old Reliable"™

1 ea 1 year limited warranty, standard Installed by dealer on one of item 28

ITEM 29 - CAN RACK (1 REQ'D)

Channel Manufacturing Model CSR-156 Dimensions: 82(h) x 25.5(w) x 42.25(d) Can Rack, First In / First Out, Heavy-Duty Series, 25.5"W x 42.25"D x 82"H, Aluminum Construction, (156) #10 Cans, Stationary, Made in USA, NSF, 165lbs. (ITEM WEIGHT ONLY), weight does not include 50 lbs. for pallet weight

1 ea Lifetime warranty against rust and corrosion

1 st Accessories, Corner Bumper (Set of 4), 1lbs. (ITEM WEIGHT ONLY)

ITEM 30 - WIRE SHELVING UNIT (LOT REQ'D) Quantum Model

4kt	WR74-2436GY Dimensions: 74(h) x 36(w) x 24(d)
	Wire Shelving Starter Kit, 36"W x 24"D x 74"H, 600 - 800 lb. capacity, includes
	(4) wire shelves & (4) posts, gray epoxy antimicrobial finish, NSF, shipped KD
3 kt	Wire Shelving Starter Kit, 54"W x 24"D x 74"H, 600 - 800 lb. capacity, includes
	(4) wire shelves & (4) posts, gray epoxy antimicrobial finish, NSF, shipped KD
2 kt	Wire Shelving Starter Kit, 60"W x 24"D x 74"H, 600 - 800 lb. capacity, includes
	(4) wire shelves & (4) posts, gray epoxy antimicrobial finish, NSF, shipped KD
1 kt	Wire Shelving Starter Kit, 48"W x 24"D x 74"H, 600 - 800 lb. capacity, includes
	(4) wire shelves & (4) posts, gray epoxy antimicrobial finish, NSF, shipped KD
10 kt	15 year limited warranty (limited against rust and corrosion)
10 st	Casters, set of (4) 5" swivel (2 with brakes), polyurethane & stainless steel

FEC to deliver and set in place all equipment and dispose of all packaging. Final electrical connections and all plumbing will be provided by SAGINAW PUBLIC SCHOOLS. FEC to coordinate all required electrical connections with the district and provide all needed plans for such.

END OF SECTION

SAGINAW PUBLIC SCHOOL DISTRICT

BID SHEET

Serving Addition & Renovation 2022

Total price for items # 1 - 30	\$
F.E.C. Bidder Info:	
Business Name	e:
Address:	
Phone:	
Contact:	
Bidders Signat	ure:

Return via mail by 10:00am July 11, 2022 to: Saginaw Public Schools Board of Education 550 Millard Rd. Saginaw MI 48607 ATTN: Julie Johnson Food Service Department

Saginaw Public Schools – Alternate High School - Serving Addition & Renovation