

DIVISION-10 SPECIALTIES

SECTION 10.1 GENERAL
10.1.1 The "General Requirements" of these specifications are hereby made a part of this Division.
SECTION 10.2 TOILET ROOM PARTITIONS - (When called for on plans)
10.2.1 SCOPE
Furnish and install toilet room partitions, and screens including all doors, necessary hardware, and fittings.
10.2.2 MATERIALS
A. Toilet Room S/S Partitions by Bradley, For Bradley pre-negotiated strategic pricing and direct purchase program contact: Tom Simonek - 262.532.6089, fax # 262.532.6055 or email at: tom.simonek@bradleycorp.com
B. Toilet partitions and screen faces and edges shall be stainless steel with a mirror finish and a spiral design scratched finish. All supporting stiles shall be floor to ceiling, securely anchored at both ends. Same finish. Head rails shall be securely fastened to walls.
C. All hardware shall be heavy nonferrous chrome-plated castings which are corrosion resistant and self-lubricating. Fasteners shall be by means of thru-bolts with thru-proof heads. All applicable hardware must comply with ADA and Calif. Title 24 requirements for the disabled.
D. Urinal and/or privacy screens shall have floor to ceiling pilasters, securely anchored at both ends. See plans for sizes and dimensions.
10.2.3 CONSTRUCTION
Doors, panels, pilasters, and stiles shall be constructed stainless steel. Doors to be pre-notched and recessed to accommodate concealed controlled gravity type hinges
10.2.4 INSTALLATION
All installation shall comply with ADA and Calif. Title 24 in California. Installation to be per plans and details and of first class workmanship. All panels, pilasters, screens, and stiles shall be installed as close as possible to the adjacent surface. All urinal screens to be made at 4' 6" high. Screens to extend out from the wall surface as noted on plans. Field measure for all partitions. No shop drawings are required.
SECTION 10.3 BICYCLE RACK
10.3.1 General Contractor is to provide (2) each ballast style bike posts - Belsom Outdoor Model# BDL450-2R-SF-C Red Finish, G.C. to red head 4 Bolt base flange to concrete walk as shown on plans. If plans reflect a Bike Rack to match shopping center, G.C. is to provide that rack instead.
SECTION 10.4 INSECT CONTROL
10.4.1 SCOPE
Provide and install "Boric" crystals as indicated in this specifications.
10.4.2 MATERIALS
"Boric" with Boric Acid, manufactured by R. Value Inc., Smyrna, GA, may be purchased from Dewey Pest Control, 3711 Beverly Blvd., Los Angeles, CA 90004, (213) 560-6804.
10.4.3 INSTALLATION
A. Read directions on container before opening. "Shake well before opening."
B. Apply crystals into cavity of all interior and exterior stud/bulkhead walls, do not let material get wet. Powder shall saturate slit plate with a minimum 1/8" thick material coverage.
SECTION 10.5 NOT USED
SECTION 10.6 NOT USED
SECTION 10.7 KNOX BOX (Where Required by Fire Dept)
10.7.1 SCOPE
Furnish and install Knox Box where shown on plans. Knox Box is available from The Knox Company; Newport Beach, CA; 1-800-552-5669.
10.7.2 MATERIAL
Model #4400R recessed mounted. Color to be aluminum.
SECTION 10.8 SAFE
10.8.1 SCOPE
General Contractor to install OWNER provided safe as indicated on the drawings. Safe to be installed bolted to floor. Cove base tie to be installed at exposed sides. All safe to adjacent walls and equipment to be sealed so as to eliminate any areas of food, dirt or dust gathering in spaces that cannot be cleaned.
SECTION 10.9 NOT USED
SECTION 10.10 RESTROOM ACCESSORIES
10.10.1 SCOPE
Provide and install restroom accessories as noted on the drawings. All applicable hardware noted must be purchased and installed in compliance with ADA and Calif. Title 24 requirements
Soap Dispensers and Toilet Paper dispensers are provided by OWNER Operations with the small wares delivery near the end of project or provided by sanitary vendor. If Health Dept. inspections occur before this delivery, GC may be required to purchase temporary dispensers as needed. Install by GC. Baby Changing Tables provided by OWNER and installed by GC.
SECTION 10.11 INTERIOR SIGNAGE
10.11.1 SCOPE
Install owner provided interior sign package to include the following:
Owner will provide the interior sign package through HED. This will include:
• (2) "Please Wash Your Hands" sign - (1) each restroom
• Dining Occupancy Sign and Vinyl number sets.
• Vinyl / plastic Handicapped symbol for front door.
• Restroom doors and wall Braille Handicapped required signage.
SECTION 10.12 DELIVERY DOOR ALARM & DOOR SCOPE
10.12.1 SCOPE
General Contractor to provide and install the Monitor 4000 delivery door alarm and the door scopes for the delivery door and office door. Contact Bob Barr at Security Products Inc., (800) 452-5276.

DIVISION 11 EQUIPMENT

SECTION 11.1 GENERAL
11.1.1 The "General Requirements" of these specifications are hereby made a part of this Division.
11.1.2 GC to become familiar with sheet E01 and E02 and schedule on E02 for responsibilities of equipment.
11.1.3 The General Contractor is responsible for coordinating, scheduling installation and the hook-up of all OWNER supplied equipment. See Specifications 11.6 and 1.6 of this Specification. U.N.O. can provide bid address. (OWNER will provide a Vendor Contact List at start of project to coordinate with GC.)
SECTION 11.2 STAINLESS STEEL KITCHEN EQUIPMENT
11.2.1 SCOPE
Owner's Vendor to provide kitchen equipment. G.C. to unload, install and make all final utility connections to kitchen equipment.

11.2.4 DROP SHIP ITEMS
The stainless steel fabricator, when accepting drop shipped merchandise, shall send delivery receipts along with the receiving copy of Owners purchase order to HED with notations denoting any missing parts also. He shall accept responsibility of such merchandise and will be solely responsible for initiating and processing all freight claims due to damage in shipping, whether damage is visible or concealed at time of delivery, or whether damage is to interior workings of equipment.
SECTION 11.3 WALK-IN COOLER & FREEZER
11.3.1 SCOPE
A.Owner's vendor to Provide and install prefabricated walk-in cooler and freezer. Units shall be per the dimensions shown on sheet A1.0 of plans. Unit must meet all applicable NSF requirements and bear seal. Unit must also meet all UL / ETL requirements. Walk-in shall be purchased by Owner. GC to coordinate installation.
11.3.2 MATERIALS
A.Exterior Finish and non-cook area Exterior: 26 ga. Stucco embossed galvanized steel.
B.Exterior Finish at cook areas: .040 Stucco embossed Aluminum.
C.Panel Construction: Shall be 4" wide x 8'-8" and consist of exterior and interior metal pans precisely formed on steel dies and roll form equipment to insure close tolerances and uniformity. Insulation must be "foamed-in-place", rigid, fire-retardant urethane to bind to exterior and interior formed pans.
Panels will have high-density urethane foam tongue and groove rails that mate in an air-tight joint with double P.V.C. closed cell gasket.
Insulation: Shall be "foamed-in-place" urethane. Shall be Class 1 and will have a 2.2 lb. density and a maximum flame spread of 25, U.L. approved conforming to A.S.T.M. E-84 Specifications, and shall remain stable at temperatures of up to 200 deg. F., and shall have a K Factor (Thermal conductivity) not to exceed .125 at 20 F mean temp. HCFC to meet all current EPA standards.
Sectional Fasteners: All wall, floor, and ceiling section joints shall be fastened with steel cam-action fasteners. Each device shall consist of a precisely located cam and a steel enclosed pin. All locks shall be actuated from inside of the walk-in with a standard hex-type allen wrench. A wrench will be furnished with each walk-in delivered. All socket ports are to be finished off with snap-in rosettes.
D.Freezer Floor: Shall be 4" high-density construction with the wearing surface .080 Aluminum over 1/2" plywood and shall have non-skid strips in aisle- (4" wide traction tape @ 6' apart). Aluminum wear surface to have integral radius at walls to meet NSF Standards. Underside finish of floor to be 26 gauge galvanized steel. A interior ramp to be provided with some aluminum wearing surface. Provide removable threshold plate to accommodate quarry tile.
E.Walk-in Doors: Size 30" X 78" flush fitting self-closing door. Door sizes shall account for 1/2" quarry tile floor. The door shall have a Kason #1229 polished, non-locking, pull handle. The hinges shall be Kason #1248 spring loaded, adjustable with a Kason #1095 door closer-(snubber). Door gasket to be magnetic, bulb-type, easily removable and shall be mounted at top and two sides of door. The bottom edge of each door shall have a double blade neoprene wiper gasket to be adjustable without the removal of the door. All gaskets to be resistant to fats, water, oil and sunlight and shall be easily replaceable. The door shall have 4" "foamed-in-place" urethane insulation as specified above. Freezer door to have heater cables (4) sides of the opening and to be UL approved. Heater wires shall have removable covers for easy replacement. J-box for heater wires to be located on exterior of door section.
F.Reach-in Doors: Cooler and Freezer to each have one flush fitting solid door, 24" X 65", 4" "foamed-in-place" urethane insulation. Each door to be self-closing with Kason #1248 spring loaded, adjustable hinges with magnetic gasket 4 sides. Kason #907 front mount vertical handle. Doors to be 10" A.F.F. Freezer reach-in to have heater cables on 4 sides of opening and one to be UL approved with easy access as noted above. Cooler reach in door exterior finish to be .040 Stucco embossed aluminum with interior of door to be 26 ga. Stucco embossed galvanized. Freezer reach in door exterior and interior finish to be 26 ga. Stucco embossed galvanized.
G.Accessories: (4) Low Temp PL Lamps and "Jelly Jar" vapor proof fixtures for fire install by EC. Provide (2) 2" dial thermostats, one Kason 1832 heated air vent in freezer door frame. (2) 2' 26 ga. Stucco gip. Vertical enclosures: Cool Curtain Clear VU model #SS3178 Plastic strip curtain to be provided for the cooler walk-in door only. Caulking to be provided to seal wall panels to floor. Silicone pointing to be provided for interior and exposed exterior joints.
SECTION 11.4 MECHANICAL REFRIGERATION
11.4.1 SCOPE
A.Owner's vendor to furnish all labor, equipment and materials and perform all operations in connection with the installation of a complete refrigeration system for the Foodservice equipment as indicated on E-2 of drawings.
B.The compressors shall be a complete factory assembled, air-cooled, UL approved refrigeration units.
C.This system shall be operational in outside ambient conditions, ranging from -20F to 110F.
SECTION 11.5 EXHAUST HOODS
11.5.1 SCOPE
Exhaust hoods furnished by Owner and installed by Contractor. Contractor to install Salkirk Zero Clearance grease duct per plans and manufacturers specifications and requirements to comply with local codes and fire department requirements. See Hood Drawings.
11.5.2 MATERIAL A. See notes and schedule on Hood Drawings.
SECTION 11.6 FIRE PROTECTION SYSTEM
11.6.1 SCOPE
Owner's vendor to provide and install three liquid fire protection systems providing duct, piping and full cooking appliance coverage per U.L. 300. GC to coordinate install. See sheet M1.0 of drawings.
11.6.2 MATERIAL
A.Fire Suppression Agent - Ansulux R-102 liquid - as per GC order for gas line installation.
B.Gas Valves - Ansul approved mechanical valves - as per GC order for gas line installation.
C.Fusible Links - Ansul approved 5000 g and 3600 g fusible links.
11.6.3 EQUIPMENT
A.Furnish and install (3) NSUL/R102 three gas liquid fire protection systems providing duct, piping and full cooking appliance coverage.
B.Fire system protecting the Fryer Hood shall be provided with 1 - 1/2" mechanical gas valve. All other hood systems and nozzles to be chrome plated and/or provide with tight fitting chrome sleeves.
C.The system protecting the Griddle Hood shall be provided with a 1" mechanical gas valve.
D.The system protecting the Broiler Hood, shall be provided with a 3/4" mechanical gas valve.
E.As part of this contract the fire protection company shall provide and install the following:
Fire extinguishers (as shown on sheet K1.0) unless directed otherwise by local fire authority.
Plastic pull covers for remote manual pull stations-(unless pulls are flush).
5' Red labels with 1" white engraved lettering designating "Griddle", "Fryer", and "Broiler". These shall be permanently placed above each pull station.
11.6.4 INSTALLATION
A.Installation must comply with National Fire Protection Association (N.F.P.A.) current edition of Pamphlet #96.
B.The fire protection alarm and tank shall be spaced 1" away from the hood surfaces.
C.All exposed piping and nozzles shall be chrome plated and/or provided with tight fitting chrome sleeves.
11.6.5 SHOP DRAWINGS
A.The fire protection contractor shall prepare drawings and submit them to the jurisdictional authority for approval and permit.
B.After installation, the system shall be tested to the satisfaction of the proper authority and Owners.
SECTION 11.7 SEATING
11.7.1 SCOPE
Owner's vendor to provide and G.C. to install the seating and the accompanying equipment as shown on the drawings and as specified below. Item numbers listed are related to unit "E0-1" schedule. Remodels may have a different item number but will have the same description and specification. GC is to coordinate installation with vendor. Where FEED Project is designated on the plans, refer to DIVISION 0 Amendment for additional requirements to seating package.
11.7.2 MATERIALS
A.Plastic laminite shall be .050 inches thick, "General Purpose Type". Color, texture and finish shall be as specified in the color/material schedule on the construction documents.

11.7.3 CABINET WORK
Refer to Section 6.3.4.
11.7.4 EQUIPMENT
A. Dining Room Seating & Decor
G.C. to unload & install all dining room seating & decor. Seating & Decor to be provided by Owner's Vendor. Seating & Decor package will include: Trash Receptacles, Core Drilled Table Bases, Dining Booth Tables, Dining Booths, Star Toppers, Queue Line Rail and any other items shown on Sheet EQ-1.
11.7.5 DROP SHIP ITEMS
The G.C., when accepting drop shipped merchandise, shall send delivery receipts along with the receiving copy of Owners purchase order to HED with notations denoting any missing parts also; he shall accept responsibility of such merchandise and will be solely responsible for initiating and processing all freight claims due to damage in shipping, whether damage is visible or concealed at time of delivery, or whether damage is to interior workings of equipment. The seating contractor will further have the responsibility of routing all warranty cards received with drop shipped merchandise to the Owner's office with notations on or with cards as to which unit card is pertaining to.
SECTION 11.9 WINDOW COVERINGS
11.9.1 SCOPE
Vendor to furnish and install Roll-A-Shade window shading system on all windows noted on plans. Windows where sun is a problem (South and West facing) shall have movable shades. Windows where sun is not a problem (North and East facing) shall have fixed shades. GC to coordinate install. (See sheet EQ-1)
11.9.2 MATERIAL
A.Shade Fabric:
1.Vinyl coated 500 denier fiberglass sunshade material.
2.RI shall be flame retardant.
3.All must meet the California flame test, title 19, section 1273.3 medium scale test for interior fabrics and the N.F.P.A. 701 flame test.
B.Roller System: Shall be a Roll-A-Shade chain-operated roller system utilizing a bi-directional, wrap spring clutch.
2.The clutch shall be made of high strength, fiberglass-reinforced polyester and high carbon steel. The clutch must never require any adjustment either upon installation or afterwards. Clutch may be mounted in either end of the roller tube.
3.Operating loop shall be #10 plastic bead chain with upper and lower stops. Color to be vanilla (or as shown on plans).
4.Roller tube shall be of sufficient diameter and wall thickness to prevent excessive deflection along its length, and shall have an adhesive strip for attaching the fabric.
5.End plug shall be a unit consisting of an outside sleeve and a center shaft and shall be made of high strength, fiberglass-reinforced polyester. The outside sleeve shall be free to rotate on the center shaft, providing the bearing surfaces on which the roller rides.
6.Bottom rail shall be extruded aluminum with spline chrome for shade attachment. Finish to be powder coated to specifications. Bottom rail shall have plastic end caps at each end.
7.Fascio mounting brackets shall support both the roller tube and the fascia panel. They must be capable of mounting inside, outside or to the ceiling, with the clutch on either the right or left hand side of the roller. All fascia brackets will be made of .060" steel and shall be powder coated to specification.
8.Fascio panel shall be installed to conceal the roller tube and mounting hardware, providing a clean finished look. Fascio shall hook onto the top of the bracket and snap in place. Fascio panel shall be made of .062" extruded aluminum and shall be powder coated to specification.
11.9.3 INSTALLATION
A.Mount fascia bracket to window stops @ head & jamb.
B.Adjust shade to stop 1/4" above bottom stop. Set stop on chain accordingly.
C.Adjust shade to stop in "cover position at 15" down from head and set stop on chain.
SECTION 11.10 PLAYGROUND EQUIPMENT-(Where Applicable)
A.Owner to furnish and install all play equipment, including safety matting as indicated on Playground vendor shop drawings. The GC shall provide the site plan drawings to the G.C. to coordinate site access, ground surface, and utility markings. G.C. to furnish and install the flat rubber flooring in remainder of play area plans.
C.Concrete or asphalt base, concrete curbs, steel fencing, gates, lighting, flooring, etc. shall be by General Contractor.
SECTION 11.11 OUTSIDE SEATING (Where Applicable)
11.11.1 SCOPE
A.Furnish and install outside seating - tables, chairs and umbrellas as shown on plans.
1.Table Legs - Rubberized steel expanded metal tops welded to rubberized coated steel supports that bolt to steel frames.
2.Steel Frame - Minimum 14 gauge 1 1/2" x 2" steel tube all joints soundly welded. Provide welded 12" x 12" top plate. All legs to be ground smooth. The framework to be finished with fused vinyl powder in Glass Black.
3.Seats - Powder coated steel support chair with steel back. Seat to be solid color surface of 3/16" fiberglass mounted to steel chair frame. Provide (4) 1/4 x 20 threaded tee nuts for mounting to frame work.
4.Umbrellas - Color Red to match owning material unless noted otherwise.
11.11.2 INSTALLATION
Seating casters shall be surface mounted using concealed bolt down fasteners as shown in the details. All units to be set level. GC to coordinate install with vendor.

DIVISION 15 MECHANICAL

SECTION 15.1 GENERAL
15.1.1 The "General Requirements" of these specifications are hereby made a part of this Division.
SECTION 15.2 HEATING AND VENTILATION
15.2.1 SCOPE
A.Furnish and install the complete Heating and Ventilation package as shown on Mechanical Drawings. See M Drawings for specifications & details.
SECTION 15.3 PLUMBING
15.3.1 SCOPE
Work in this section shall include but not be limited to the following:
A.All soil, waste, vent and sanitary drainage outside and inside the building and to the sewer
B.All hot and cold water piping and complete connections from the water meter to all plumbing fixtures and equipment requiring water connections. These systems shall be complete with controls, etc.
C.Gas piping and necessary equipment including connection to gas equipment and meter.
D.Furnishing and setting of plumbing fixtures, including all the required trim.
E.Roof drains and storm drainage piping.
F.All rough-in and final connection to equipment in the food preparation area and dining area.
G.Furnishing of all final plumbing connections to air conditioning units, evaporative coolers, etc.
H.Furnishing of all drain lines from each refrigeration, air conditioning, etc. fixture to approved receptor.
1.Meters and connections: Water main, service connection and meter will be furnished and installed by water company- U.N.O on plans. Plumbing contractor will install all permanent water supply lines from the meter and complete the works as shown, all in accordance with requirements of the local water company. Assessments shall become a part of this Contract. Contractor shall arrange for all meters to be set. Water meter shall be termed a charge, and not a fee or assessment.
1.Gas Service main including meter will be installed by the gas company. Any cost in connection with this service will be paid for the plumbing contractor. Plumbing contractor will install all gas gas piping from meter and complete the work as shown, all in accordance with requirements of the gas utility having jurisdiction.
2.Sewer connection shall be per requirements of local district.
J.Excavation and backfill for all plumbing.
K.Any fees or assessments required for any utility connections are a part of the plumbing contract.

15.3.2 COMPLIANCE WITH CODE
A.All work shall comply with requirements of all applicable codes, laws, ordinances, and regulations of all authorities having jurisdiction. Nothing in these plans or specifications shall be construed to permit work in violation of the governing codes. Where design exceeds code requirements, design shall be followed.
B.The contractor shall obtain and pay for all permits, plan check fee, inspection, etc. and furnish signed certified and acceptable copies to OWNER for their records. Before final acceptance of the work, furnish to OWNER, "Certificates of Inspection", stating that the work has been inspected and approved by the authority having jurisdiction.
15.3.3 LOCATIONS
A.Locate the work to secure the best possible headroom and space condition. Neatly arrange all work.
B.Verify that piping and fixtures can be installed in allocated spaces without restriction or interference in required access or clearance to this equipment installed by others.
C.Any work installed contrary to the above, in the opinion of OWNER, shall be relocated without additional cost to OWNER.
15.3.4 OPENINGS - IMPORTANT
A.No holes for piping will be allowed in any structural members (except where noted on plans) without consent of OWNER. Openings have been indicated on the Architectural and Structural Plans, and these openings are specified under other sections.
B.At a time in advance of the work, verify the openings or furnish new instructions as to requirements for these openings. Should the furnishing of this information be neglected, delayed or incorrect, and additional cutting is found to be required, the cost of same shall be charged to the contractor.
C.DO NOT CUT STRUCTURAL MEMBERS.
15.3.5 PROTECTION
A.The contractor shall protect new and existing work, materials and landscape from damage and provide for the safety of the public and workman by warning lights and barricades or other suitable safety devices. The contractor shall assume all responsibility for materials, storage, damage to equipment and safety to public and workman until final acceptance by OWNER.
15.3.6 GUARANTEE
A.The Contractor shall be responsible for all work under this section and shall leave the system in perfect operating condition. He shall regulate, repair and replace at his own expense any defective workmanship, materials and equipment which may become apparent within one (1) year after the date of the final acceptance of the work. The decision of OWNER shall be final in respect to imperfections. The Contractor shall furnish to OWNER with all manufacturer's written guarantees of materials and equipment.
15.3.7 MATERIALS
A.Materials shall conform to the applicable ASIM code or ASME specification and standard and to date, unless otherwise specified.
B.Should directions of manufacturers of goods used in this contract, per points shown on the plans or herein specified, such directions shall be followed.
15.3.8 PIPE SCHEDULE
A.Refer to the Piping Materials Schedule on the Plumbing Plans for proposed materials.
15.3.9 PIPE MATERIALS & FITTINGS
A.Cast iron soil pipe and fittings to be service weight cast iron class B conforming to ASTM A_72.
B.Copper tubing to conform to ASTM B.88.
C.Copper fittings to be EPDM gaskets. Installation fittings shall be installed at all points where copper or brass or tubing joins ferrous pipe, fittings or equipment.
D.Solder to be silver solder conforming to ASTM B202.
E.Cold lead or black iron pipe to be standard weight conforming to ASTM A.120.
F.Fittings to be standard weight galvanized iron malleable fittings, except at gas line, where malleable black iron fittings shall be used.
G.All A.B.S. pipe and fittings shall be A.B.S. and D.W.R. ASTM #D2680 schedule 40.
H.P.V.C. pipe and fittings shall be schedule 40 and meet NSF and ASTM #D3034 requirements.
I.PEX pipe to be used to join P.V.C. pipe shall be NSF listed and labeled.
J.PEX pipe to be installed using s/s fittings and clamps using proper crimp and cutting tools and tolerances installed per manufacturers specifications. NO PEX shall be exposed to direct sunlight.
15.3.10 PIPING INSULATION
A.Hot and cold water piping shall be insulated with an insulation having a maximum k factor of 0.28 @ 75F mean temperature for 2" wall, flexible elastomeric thermal type, closed cell insulation similar to op armo-flex tube insulation (armocel), insulate fittings continuously, but do not insulate valve bodies, nor fixture supports. Insulation shall be applied after piping has been installed, tested and is in a dry and clean condition. Longitudinal seams shall be sealed. Lateral seams (butt joints) shall be sealed on cold water pipes only.
B.Micro-Lok pipe insulation shall be provided with Type Ap_2 composite rotolated roll purpose jacket with integral pressure sensitive sealing adhesive. Transverse butt joints shall be covered with Johns.Mansville "Z.Tape" white pressure sensitive tape. Rubber seals and joints shall be adhered with Rubulox Contact Adhesive per manufacturers recommendations.
C.Fittings and valve bodies shall be covered with Johns.Mansville "H.Lo Temp" fiberglass inserts protected with Johns.Mansville "Zeston" premoiled polyvinyl chloride fittings covers sealed with Johns.Mansville "Z.Tape" white pressure sensitive tape. Flanges, unions and strainers shall not be covered. Insulation shall be neatly terminated on each end at flanges and unions with Johns.Mansville No. 375 insulating cement.
D.Outdoor insulated piping (including roof), shall be provided with Chilers.Lok On 16 mils thick smooth aluminum jacket with longitudinal z_joints and Chilers "Jocs" smooth aluminum trim. Fittings and valve covers (Transverse) butt joints shall be covered with Chilers 2" wide preformed butt straps with factory applied plastic sealing compound.
E.Both hot and cold water piping and tubing exposed on roof shall be insulated as specified in item "D" above.
15.3.11 CLEANOUTS
A.Contractor shall provide and install cleanouts at all bends, angles and ends of all waste and sewer piping. All cleanouts shall be brought to grade and in all cases shall be accessible. Exterior runs to sewer shall have clean-outs at a maximum of 65 feet apart.
B.Exterior Cleanouts shall be provided with Brooks No. 3_RT open bottom concrete box with steel frame and traffic cover with the word "SEWER" cast in cover.
C.Interior Wall Cleanouts shall have cleanout body plastered or tiled in the wall with the face of the body flush with the finished wall.
D.Interior Floor Cleanouts shall have gasketed water_tight scoriated adjustable screw secured round top.
15.3.12 HANGERS AND SUPPORTS
A.For soil, waste and storm piping all horizontal runs shall have adjustable ring pipe hangers with supporting rods spaced not more than 10 feet apart.
B.For water and gas piping, all horizontal runs shall have split ring pipe hangers with supporting rods spaced not more than 10 feet apart.
C.Provide isolators at water pipe hangers.
D.All pipe 1 1/2" and larger shall be supported every 10 feet by pipe hangers from top chord of truss.
15.3.13 ACCESS PLATES/PANELS
A.Contractor shall provide Wilkins/Zurn backflow protection devices or vacuum breakers, at locations, if required by governing authorities. Contractor shall check with authorities to see if such are required.
15.3.15 TRENCHING, EXCAVATING & BACKFILLING
A.All trenching, excavating and backfilling for the installation of all plumbing work shall be done under this section of the specifications. After approval of installation, trenches and excavations shall be backfilled with sand or approved imported soil. Conduit trenches shall be leveled to prevent deformation of pipes after backfill. Backfill material shall be free of large clods, stones and debris and shall be compacted to eliminate voids and to obtain a density of ninety percent of the adjacent soil. Care shall be taken to prevent damage to pipes or other buried items and to obtain full and uniform bearing against the sides. Truck rolling may be used for shallow trenches 24 inches or less in depth. Where backfill occurs in paved areas, a mechanical tamper shall be used to obtain the compaction required under other sections of these specifications applicable to work in such areas. Backfill under building slabs shall be approved by OWNER. If sand is used as backfill material, jutting will be permitted. Plumbing Contractor shall remove excess dirt from site.

15.3.16 INSTALLATION
A.All piping shall be run concealed except where shown otherwise on drawings. Where piping is run exposed it shall be placed in unimportant and out of the way places, as approved by OWNER.
B.Valves, traps, cleanouts, and other apparatus to be installed in an easily accessible location.
C.All steel piping underground or in concrete shall be dipped in asphalt and spirally wrapped with two layers of 15 lb. asphalt saturated paper, fully bedded in the asphalt and painted with a full coverage of asphalt paint. All fittings and other joints shall be wrapped in the field in a similar manner.
D.Soil, waste, vent, offsets and house drains to be installed with a minimum, uniform grade of 1/8" per foot and maximum of 1/4" per foot.
E.Hot and cold water lines shall be at least six inches apart where piping is parallel.
F.Twenty-four (24) gauge galvanized iron flashing assembly to be furnished and installed at each pipe passing through the roof. Flashing shall have reinforced boot and be complete with galvanized iron counter flashing sleeve and perma-seal waterproofing compound. All pipes shall be terminated 4 inches above the parapet. All vent pipes through roof must be fully supported by a minimum of 10" diameter pipe.
G.Provide trap primers when required by governing authorities and as shown on the plans.
H.Provide water hammer arrestors as shown on the plans. Arrestors shall be at fixtures, not in the attic space. No access panels are required.
I.Break off vents and pipes through roof into equipment. No pipes shall be on the sloped roof area. No vent through the roof shall be less than 10 feet from any air intake. Break any vent away to maintain the minimum 10" diameter.
J.Black pipe gas line, where shown being run in pipe sleeves through a floor, shall be in a 3 inch sleeve, and shall be protected through roof per applicable Building Code, or per local requirements.
K.Soil, waste, storm drain, gas and water piping shall not rest on chords or webs of trusses. Pipe hangers must be used per 15.3.2.
15.3.17 FIXTURES AND EQUIPMENT
A.General:
1.All faucets shall be equipped with renewable seats. All exposed metal parts of plumbing fixtures shall be of a high quality production manufacturer.
2>All rough-in and secure fasteners to supporting surfaces as specified and shall be installed in accordance with manufacturer's instructions. All hung fixtures shall be securely attached to wood blocking securely fastened in place.
3.Every support for every fixture and piece of equipment requiring the various services shall be securely valved. In general, these valves are specified with the fixture, but where not called for in the fixture specifications, the contractor shall provide suitable compression stops (copper key or screw drive type lockshield valve) in addition to the faucets.
4.Plumbing fixtures shall be Zurn fixtures as specified.
5.Zurn items specified below with a (*) will be provided in a complete package provided by owner.
6.Floor sink lip shall be flush with finish floor tile unless required otherwise by local jurisdictional authority. All sinks must be aligned parallel to alignment of mortar joints in floor tile. Any floor sink not conforming to above, shall be removed and reset to conform.
B.Refer to the Plumbing Fixture Schedule on the Plumbing Plans for proposed specifications:
C.No piping should be run on roof. If unavoidable Plumbing Contractor shall securely support all water, gas, condensate piping, and any other pipes on roof, with redwood blocks 3.1/2" wide and 12" long set in roof matting, not to exceed 3'-0" on centers. Pipe shall be strapped to wood blocks. Provide isolation between straps and pipes. (Do not nail blocks thru roofing.)
15.3.18 CUSTOM KITCHEN AND RESTAURANT EQUIPMENT
A.Plumber will provide rough in and final connection to waste, vent, hot and cold water, gas, etc. all as indicated on the plan and/or as required to special equipment by others.
1.Kitchen Equipment supplier will provide Pot and Vegetable sinks. Owner to provide (3)ea. Zurn Z843J-XL Faucets, (1)ea. Zurn Z825X1-HCI Pre-Rinse unit and (4)ea. Zurn Z89600 lever wastes. Plumber will be required to install these items on the Pot & Vegetable sinks.
2.Plumber will provide and install drains, valves, tees, traps and/or indirect drains -(copper in all locations except drink dispenser & ice machine drains where PVC is acceptable) as required to complete the work. Each supply line to each fixture shall be equipped with an angle stop valve located in an accessible space. All "T" traps shall be removable.
3.All gas valves shall have 1/2" turn shut offs with lever handles - able to turn without the use of special tools.
4.Plumber to note all rough in locations as dimensioned on the plumbing rough in plan. Critical dimensions must be kept. If for any reason there is concern about a specified dimension it shall be brought to the attention of the Project Manager to verify.
15.3.19 EQUIPMENT
A.Refer to the Plumbing Equipment Schedule on the Plumbing Plans for proposed specifications:
15.3.20 TESTS
A.All tests shall be made in strict accordance with all applicable ordinances or as outline below. OWNER shall be notified in advance of the time schedule for tests, so that an OWNER's representative is present at the test.
1.The entire soil, waste and drainage system shall be tested under water pressure.
2.All water piping shall be tested under a hydro-static pressure of 125 p.s.i.
3.All power, water and all instruments required shall be furnished by the plumbing contractor as well as all necessary labor.
4.All gas piping shall be tested under air pressure of 10 p.s.i. which shall be held for four hours without a drop in pressure.
5.Tempered water to be tested at hand sinks and lavatory's to maintain 110 degrees.
B.If the requirements of the ordinances are in excess of these, they shall be followed.
C.All tests shall be made in the presence of and to the satisfaction of OWNER or his representative.
15.3.21 ADJUSTING
A.Upon completion of cleaning of system and apparatus, automatic parts of plumbing system shall be carefully adjusted for normal operation. All flush valves shall be checked for proper operation and final adjustments made where required. Vacuum breakers on water supply to fixtures shall be inspected and cleaned of any foreign matter that would hinder their proper functioning.
15.3.22 CLEAN UP
A.After completion of work and prior to final acceptance, thoroughly clean all parts of the work, remove all debris and surplus equipment and leave installation in perfect condition, ready for use.
SECTION 15.4 FIRE SPRINKLER (IF APPLICABLE)
15.4.1 SCOPE
A.G.C. to coordinate fire sprinkler and monitor system if required on plans. Sprinkler system to comply to N.F.P.A. #13 requirements. Sprinkler contractor shall include all costs from water districts for service connection, detector check valve and vault as required.
1.Installation shall comply to all City, County and Fire Dept. requirements including any monitoring and alarm system to provide complete coverage of entire floor area, walk-in cooler and freezer (dry packout) and complete attic coverage, including all interior soffitt areas.
2.Monthly or annual monitoring fees would not be a part of costs of this installation but would require coordination with the Construction Project Manager to assure an agreement was made with the restaurant operations department.
3.Sprinkler heads shall be semi-recessed with chrome plated escutcheon in all public areas, including restroom and vestibule. Sprinklers shall have pendant heads with chrome escutcheon.
4.Fire sprinkler service shall enter at the rear of the restaurant, locate the riser and required alarm assembly adjacent to the water heater in clear space - keep aisle ways clear.
5.Fire sprinkler contractor shall immediately submit complete shop drawings for local fire authority plan check and approvals as well as owner approval. Contractor shall include all required fire department tests.

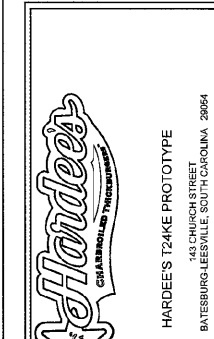
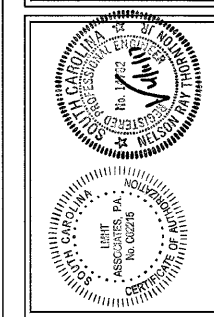


Table with columns: REVISIONS, SPECIFICATIONS, and SHEET NUMBER. Includes a grid for revisions and a large 'SP5' sheet number.