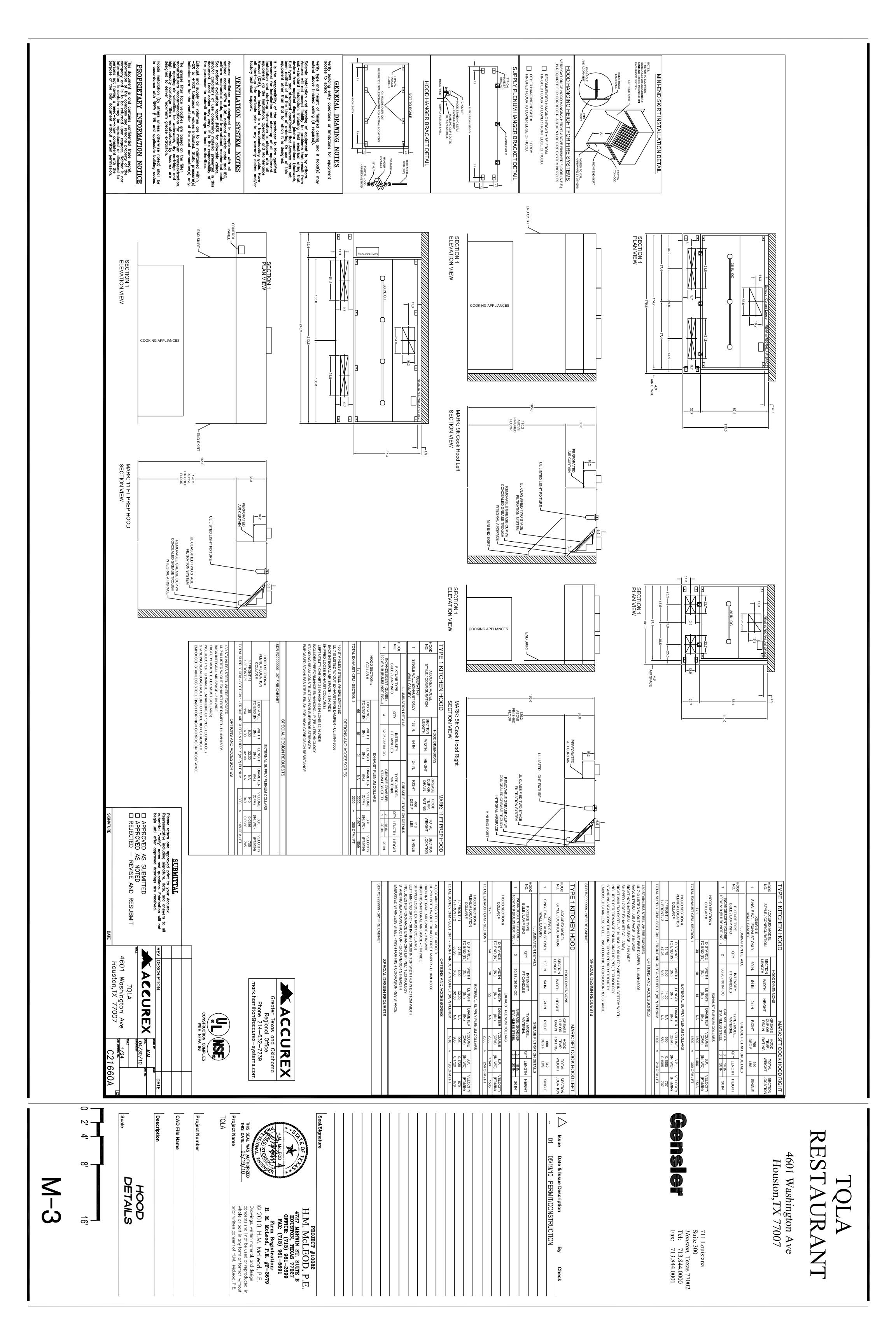
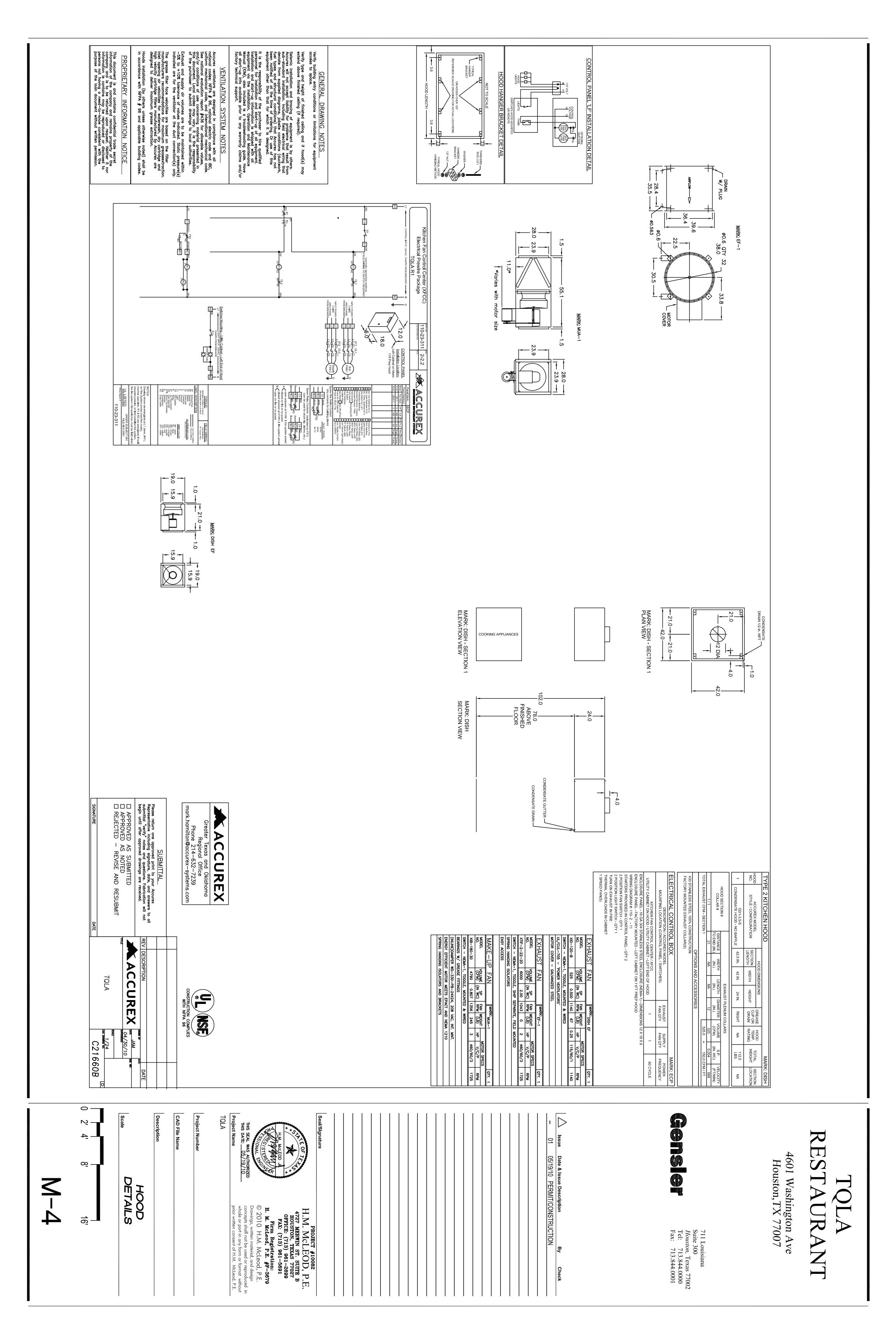
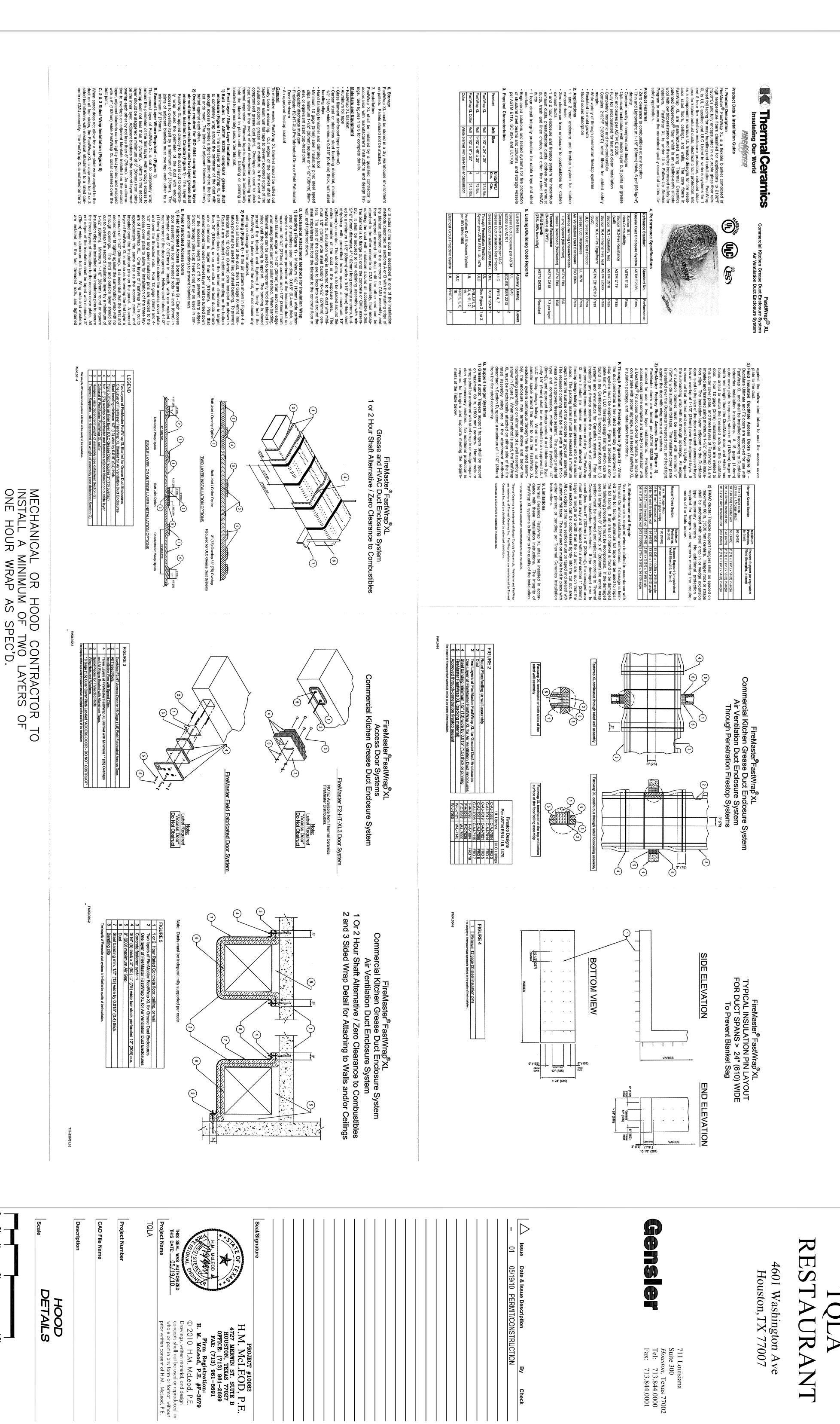


6 MECHANICAL SYMBOLS	AIR DAMPER U	Φ - β π - 3	GAS FLUE RISER. VERIFY SIZE WITH PLANS.  SPIN-IN AIR TAP WITH MANUAL BALANCE DAMPER	VE A SL BEND E RESILIEN PHERE N THE PIP THE PIP TENTS.	FASTEN CONDENSOR TO WITHSTAND 110 MPH GUST OF WIND  1/2" BOLT  VIBRATION ISOLATOR.  4X4 TREATED WOOD SLEEPER ROOF, RE: ARCHITECTURAL SIDE VIEW DRAWINGS.	8 FLUE/PIPE PENETRATION THRU ROOF	R TO DUCT AROUND REFER TO ARCH.  REFER TO ARCH.	57.2 55.5 11.2 58.4 55.7 11.0  - FLD  on specified design altitude. on sea level.  UNIT SCHEDULE	NOX INDUSTRIES INC - EQUIPMENT SCHEDULE -ELECTRIC OR ELECTRIC-ELECTRIC SPLIT SYS' mID Coil Refrigerant Cond NominalTons Namebrand (ton) 3,4 7.5 R-410A Lennox 1 10.0 R-410A Lennox 2 12.5 R-410A Lennox Coil Unit Unit AR DischargeWB DischargeBB DischargeWB EE (°F) (°F) (°F) (°F) (°F) 3,4 54.4 57.8 55.2 11.
		ED AIR DIFFUSIZE PER PLA ED AIR DIFFUS ETAIL FOR MC ETAIL FOR MC R DEVICE SC CONDENSATE I ND OF LINE ( HVAC UNIT. WITH DETAIL.	DUCT UP TO SIZE PER PLANS DUCT UP TO SIZE PER PLANS	RETURN AIR  RETURN AIR  RETURN AIR PLENUM BOX  AUXILIARY GALV. DRAIN PAN  PUC AUXILIARY DRAIN ROUTED TO FLOOR SINK.  STUCTURAL PLATEFORM  PLATEFORM  AUXILIARY GALV. DRAIN PAN  ROUTED TO FLOOR SINK.  VIBRATION ISOLATOR (TYP. 4) ON FLOOR  TO PLOOR MOUNTED AHU DETAIL		5 DUCT SUSPENSION DETAILS    \rightarrow \frac{2}{2} - \lin \frac{2}{10} \tag{Noization dectector supply side all units over 2000 cfm}	CHANNEL AND STRAP AND SAT HANGING DETAIL	Electric 25.0 85361 24.7 480V 3Ph 480V 3Ph 60 Electric 35.0 119505 27.7 480V 3Ph 480V 3Ph 60	Coil Supply ExtStaticPress  Model AirFlow Supply (cfm) (in.WC)  S-460-3 TAA090S4D-STD-460 2400 0.80  S-460-3 TAA120S4D-STD-460 3200 0.80  D-460-3 TAA150S4D-STD-460 4000 0.80  Electric H/E H/E Voltage Condenser  re Heater HighOutput Heat (kW) (Btuh) Rise ic 15.0 51216 19.8 480V 3Ph 480V 3Ph
2 MECHANICAL SCHEDULES		EXHAUST FAN SCHEDULE           DESIGNATION         MFG.         MODEL         CFM         VOLTAGE         HP/SP         CONSTRUCTION         NOTES           TEF-1         BROAN         L100         100         120 v. 1 PHASE         FRAC. O.25 SP         DISCHARGE W/ BACK DRAFT DAMPER O.25 SP         PROVIDE WITH SWITCH ON/ OFF FOR MS-1           TEF-3         BROAN         L150         150         120 v. 1 PHASE O.25 SP         FRAC. O.25 SP         DISCHARGE W/ BACK DRAFT DAMPER O.25 SP         PROVIDE WITH BACK DRAFT DAMPER, DIRECT DAMPER, DIRECT DAMPER DRIVE TIME CLOCK CONTROLLED           TEF-3         BROAN         L150         150         120 v. 1 PHASE O.25 SP         FRAC. O.25 SP         DISCHARGE W/ BACK DRAFT DAMPER DRIVE TIME CLOCK CONTROLLED         PROVIDE WITH BACK DRAFT DAMPER, DIRECT DAMPER, DIRECT DAMPER DRIVE TIME CLOCK CONTROLLED	MAILER INDUSTRIES 510VO  METALAIRE  NAILER INDUSTRIES 5104  NAILER INDUSTRIES 5104  SUPPLY 24" ROUN RETURN SURFACE  TES: ** NECK SIZE AND CFM AS NOTED ON FLOOR PLAN DRAWI ** ALL GRILLES TO BE PAINTED TO MATCH ARCHITECTURAL	VICE SCHEDULE  APPL.  MOUNTING  NDUSTRIES 4320CB-0722-0725 SUPPLY 24"x24" lay-in grid 165' fusit  NDUSTRIES 6145H  RETURN 24"x24" Lay-in grid Aluminum.	CEILING DIFFUSER NECK CHART         BRANCH DUCT SIZE CHART           NECK SIZE         CFM RANGE         DUCT SIZE         CFM RANGE           6" DIA.         0 - 80 CFM         6" DIA.         0 - 80 CFM           8" DIA.         85 - 175 CFM         8" DIA.         85 - 175 CFM           12" DIA.         180 - 320 CFM         10" DIA.         180 - 320 CFM           14" DIA.         555 - 825 CFM         14" DIA.         555 - 825 CFM           16" DIA.         830 - 1200 CFM         16" DIA.         830 - 1200 CFM	3 FREEZER/COOLER CALCULATIONS	UNDERWRITERS LABORATORIES INC.  CLASSIFIED BUILDING UNIT  54M4  SURFACE BURNING CHARACTERISTICS  4" PANEL CORE Flame Spread	24.0     40     42.0     45     3.4     3.4     465     435     1,2,3       25.0     30     57.0     60     4.8     4.8     535     455     2,3	sticPress         SupplyFan         SupplyFan         SupplyFan         SupplyPriveReq'd         Cooling         Cooling         Cooling         Cooling         Coil         Coil <th< th=""></th<>
1 MECHANICAL SPECIFICATIONS	ROOM THERMOSTATS SHALL BE PROVIDED FOR EACH NEW UNIT & EXISTING UNIT. THERMOSTATS SHALL BE MOUNTED TO A.D.A. HEIGHT REQUIREMENTS. WITH THE CONTROL WIRES CONCEALED IN WALL. THERMOSTATS SHALL BE PROGRAMMABLE (SELECT MODEL # TO SUITE APPLICATION) OR EQUAL AS FURNISHED BY THE A/C UNIT MANUFACTURER. PROVIDE WITH HONEYWELL LOCKING GUARD # TG586 (2) KEYS. THE KEYS SHALL BE ENGRAVED BAKELITE TAG ATTACHED, WITH "THERMOSTATS" NOTED ON THE TAG, AND BE TURNED OVER TO THE TENANT/MANAGER AT START-UP.	jacket, sealed waterlight with 6E silicon sealer.  2. Insulate condensate drain lines with 1/2" armaflex "AP-2000" insulation. Seal joints airtight with armstrong #520 vapor barrier adhesive and two coats of armstong finish as per the manufacturer's recommendations. Provide 16 gauge galvanized sheet metal support saddle at each hanger or support.  Contractor shall furnish shop drawings for NEW exhaust fans, and air devices. and air handlers, and hvac condensing units, and controls.  HVAC contractor shall verify and coordinate with the electrical contractor HVAC unit voltage requirements and confirm it with the equipment mfr.  Filters shall be provide din the air handling units. The factory filters shall be used during construction and a new set of 1" min. replaceable media. Metal filler frame filters shall be provided in the units just prior to est and balance.	diffusers shall be at the spin-in fitting.  B. PIPING  1. Condensate drain lines shall be PVC schedule 40 or galvanized pipe or type "L" copper pipe. Provide unistrut pipe clamps at pipe supports as required (not to exceed 6 feet O.C.). Provide dielectric separation between all dissimilar materials.  C. AIR DEVICES:  1. Air Devices: REFER TO SCHEDULE. Coordinate air device requirements with project owner.  D. INSULATION:  1. Insulate refrigerant suction piping with 1" armaflex "AP-2000" insulation. Seall all joints airtight with armstrong #520 vapor barrier adhesive and two coats of armstrong finish (each coat shall be a different color to insure 100% coverage) per the manufacturer's recommendations. Provide 16 gauge galvanized sheetmetal support saddle at each hanger or support. In addition, all lines exposed outside the building shall have a 16 mill aluminum.	immediately age (minimude 0.C. A-0" 0.C. as and allowed and the cord. verify oard. verify coop and coop and coop	manufacturer's recommendations. Suspend ductwork from structure above using minimum 18 GA., 1" wide galvanized sheet metal hanger straps (not to exceed 4'-0") or hangers as allowed by SMACNA standard (whichever is more stringent). Provide sheet metal saddles at hanger straps.  2. Rigid round ductwork shall be galvanized sheet metal, externally insulated with 1 1/2# density fiberglass, fabricated and installed per SMACNA standards. Tape and seal joints airtight with UL listed duct tape with acrylic based adhesive (latex based adhesive is not acceptable) per the manufacture's recommendations. Suspend ductwork from stricture using minimum 18 GA. 1" wide galvanized sheet metal hanger straps (not to exceed 4'-0" O.C.) or with hangers allowed by SMACNA standards (whichever is more stringent) provide sheet metal saddles at hanger straps.  3. Rectangular supply and return ductwork shall be metal duct w/ 1-1/2" wrap insulation. All ductwork, and the installation thereof, shall adhere to the latest edition of SMACNA requirements. DuctBoard shall UL 181 listed class 1 and shall be sealed and supported in the following manner.  a. All longitudinal and circumferential joints must be stable with outward flaring, 1/2" (minimum) staples 2" O.C.  b. Wipe surface where tage is to be applied with a clean cloth. (If surface has grease	ORK TO BE and U.L. #: and U.L. #: #f31 or ar ar ar and bands.	and/or changes to the location of equipment and/or materials may be required and shall be made to avoid conflicts with other building trades and existing job site conditions at no additional cost.  4. Supply and return air ducts shall be metal duct internally lined(dinning rooom) and external wrapped(above ceiling or enclosed area), fabricated and installed by SMACNA & ASHRAE Standards. Or match base building. Owner to verify.  5. HYAC contractor shall verify and coordinate with the electrical contractor HYAC unit voltage requirements and confirm it with the Architect and/or owner prior to installation. Mount to meet A.D.A. mounting requirements. Should conflicts stats between HYAC and Architectural documents, the Architectural documents shall govern.  7. Furnish and install the equipment as shown. Coordinate the size and location for new openings and/or penetrations required. Secure necessary rough-in data, templates, roofgots, roof curbs, etc. required to complete the work in a timely fashion to facilitate proper installations. Out required openings or penetrations, install the appropriate framing devices and restore the existing construction to its original condition.  8. Furnish and install all control devices including (but not limited to thermostats, relays, interlocking devices and restore the existing construction to provide a complete and workable system. Control wiring exposed outside the building shall be installed in emt conduit.  9. Contractor shall furnish shop drawings for NEW exhaust fans, and air devices and air handlers, and hvac condensing units, and controls.  10. Furnished and install the following materials:  11. Air Devices: REFER TO SCHEDULE. Coordinate air device requirements with project owner.  12. Fire dampers: Rusking type IBD2, style "B", UL labeled with 165 degree fusible link, rated for 1-1/2 hours per UL standard 555 with blades entirely out of the disretural programs.	<ol> <li>Furnish and install a complete and workable HVAC system per the plans and specifications. Comply with the latest edition of the Uniform Mechanical Code and the Uniform Building Code as it applies with modifications by the governing city to obtain all permits and pay all fees. Materials shall be new and undamaged. Equipment shall be UL LIST &amp; APPROVED by the authority having jurisdiction over such equipment and shall be warranted for a period of one year from the date of finial acceptance. Guarntee HVAC compressors in air conditioning equipment for a period of five years from the date of final acceptance.</li> <li>Coordinate work with other trades and with job site conditions before installing and/or fabricating mechanical equipment. Visit the job site prior to bid date and becoming aquatinted with existing conditions to determine the extent of mechanical work which shall be required to complete the job. No allowance and/or compensation will be made for failure to understand the scope of work required.</li> <li>The plans attempt to show the desired locations of mechanical equipment and materials and to coordinate them with other trades; however, reasonable revisions</li> </ol>	Coil       Coil       System       Coil         ssSensCool       NetSensCool       MoistureRemoval       MoistRemoval       DischargeDB         h)       (Btuh)       (1b/hr)       (1b/hr)       (°F)         22       55257       27.6       27.6       55.9         04       75650       32.1       32.1       55.9         26       89988       42.5       42.5       56.7
	2 <u>.</u> 4 <u>.</u>	MECHANICAL DETAILS	Project Name  Project Name  prior written consent of H.M. McLeod, P.E.  Project Number  CAD File Name	PROJECT #10 M. MCLEC M. MCLEC Y MERWIN ST. OUSTON, TEXAS FFICE: (713) 961- FAX: (713) 961- Firm Registrat I. McLeod, P.E. 10 H.M. McLe gs, written material, pts shall not be used			Issue Date & Issue Description By Check 01 05/19/10 PERMIT/CONSTRUCTION	711 Louisiana Suite 300 <i>Houston</i> , Texas 77002  Tel: 713.844.0000  Fax: 713.844.0001	TQLA RESTAURANT  4601 Washington Ave Houston, TX 77007







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