

TOKYO GRILLE

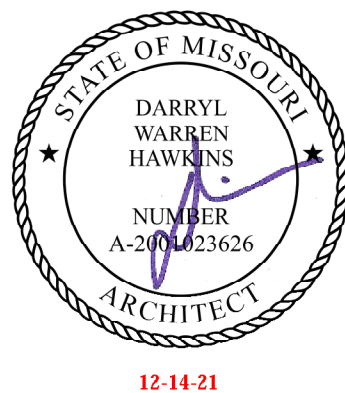
3528 S.W. MARKET ST. LEE'S SUMMIT, 64082

date: 10-21-21

REVISIONS:

INNOVATIVE DESIGN & RENOVATION

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CODE REVIEW

International Building Code, 2018 Edition
International Mechanical Code, 2018 Edition
International Energy Conservation Code, 2018 Edition
International Fuel Gas Code, 2018 Edition
International Plumbing Code, 2018 Edition
National Electrical Code, 2017 Edition
ICC/ANSI-A117.1 Providing Accessibility and Usability for Physically Handicapped People, 2009 Edition

BUILDING OCCUPANCY	GROUP B
BUILDING HEIGHT	15 ft.
STORIES	1
TENANT AREA	1430 SQ.FT
CONSTRUCTION TYPE	V-B (TABLE 503)
FIRE RESISTIVE REQUIREMENTS (TABLE 601)	STRUCTURAL FRAME 0 HRS BEARING WALLS EXTERIOR 0 HRS NONBEARING WALLS 0 HRS FLOOR CONSTRUCTION 0 HRS ROOF CONSTRUCTION 0 HRS
OCCUPANT LOAD: (TABLE 1004.1.1)	DINING 393 SF/15 SF/OCC. = 26 OCCUPANTS KITCHEN 552 SF/200 SF/OCC. = 3 OCCUPANTS TOTAL = 29
REQUIRED EXITS	1 REQUIRED 2 SUPPLIED
SPRINKLER SYS:	SPRINKLED

SHEET INDEX

1. COVER
2. FLOOR PLAN
3. PLUMBING FLOOR PLAN
4. RISER DIAGRAM
6. LIGHTING FLOOR PLAN
7. POWER FLOOR PLAN
8. MECHANICAL FLOOR PLAN

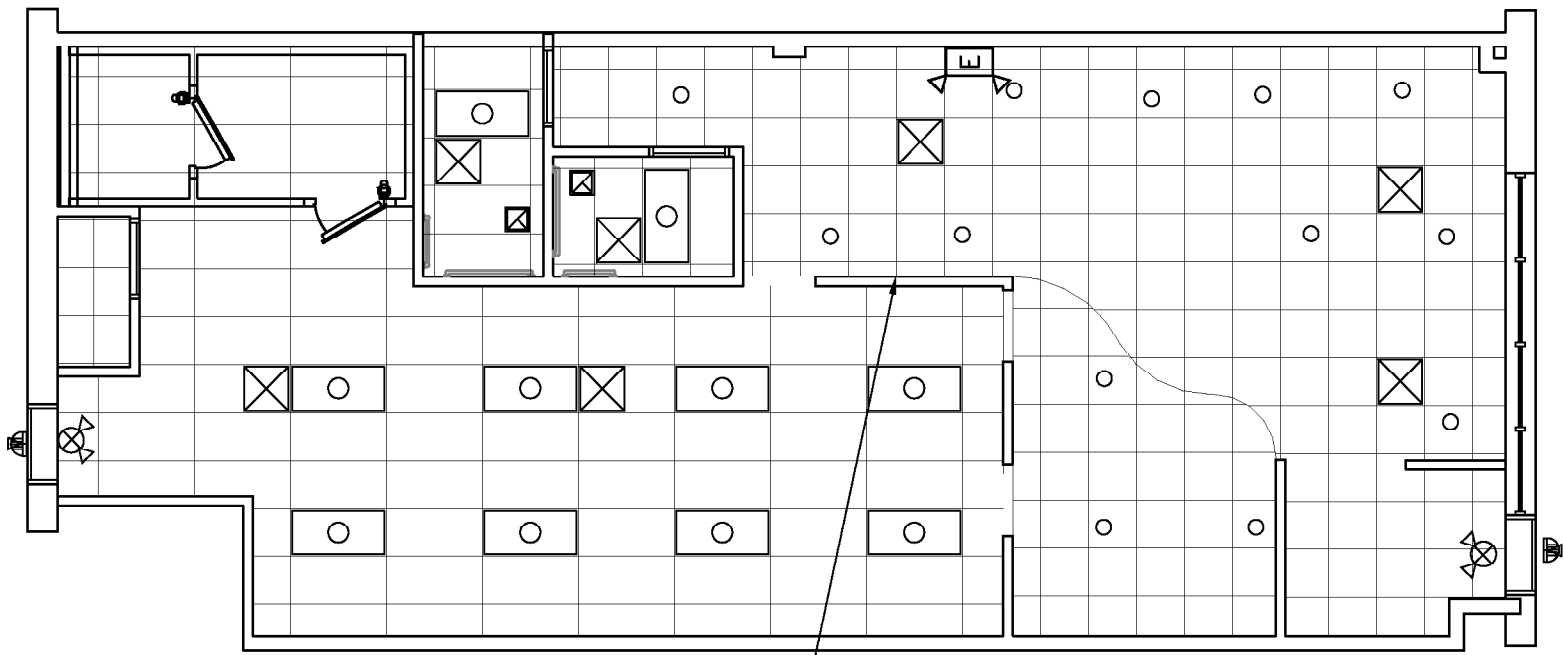


VICINITY MAP



FRONT ELEVATION

SUPPLIED AND INSTALLED BY GC		CEILING SYMBOL LEGEND
SYMBOL	DESCRIPTION	
	ACOUSTICAL CEILING TILE SEE FINISH SCHEDULE	
	RECESSED LIGHT FIXTURE	
	HANGING FIXTURE	
	2X4 FLOURESCENT FIXTURE	
	SUPPLY AIR DIFFUSERS- FINISH TO MATCH ADJACENT CEILING TILE. SEE MECHANICAL DWGS.	
	RETURN AIR DIFFUSERS- FINISH TO MATCH ADJACENT CEILING TILE. SEE MECHANICAL DWGS.	
	EMERGENCY LIGHT SEE ELECTRICAL DWGS.	
	EXTERIOR EMERGENCY LIGHT SEE ELECTRICAL DWGS.	
	EXIT LIGHT/EMERGENCY LIGHT. SEE ELECTRICAL DWGS.	
	EXHAUST FAN	



REFLETED CEILING PLAN

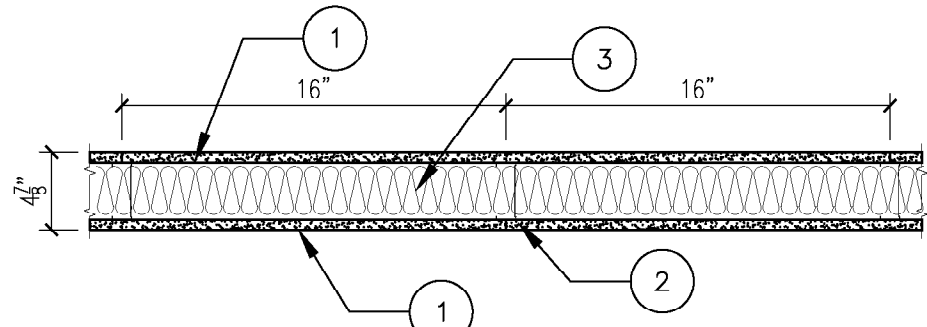
Scale 1/8"=1'-0"

INSTALL OUTLET WITHIN 25' OF MECHANICAL EQUIPMENT ON THE SAME LEVEL.
THE OUTLET MUST BE CONNECTED TO THE LOAD SIDE OF THE EQUIPMENT DISCONNECTION MEANS

ROOM FINISH SCHEDULE										
ROOM NUMBER	ROOM NAME	FLOOR	WALLS				CEILING		NOTES	
			N	S	E	W	MATL	HEIGHT		
101	DINING	VNYL	GYP.BD	GYP.BD	GYP.BD	GYP.BD	2X4	8'-6"	---	
102	KITCHEN	TILE	TILE	TILE	FRP	TILE	2X4	8'-6"	---	
103	BATH	TILE	TILE 4'A.F.F.	TILE 4' A.F.F.	TILE 4' A.F.F.	TILE 4' A.F.F.	2X4	8'-6"	---	
104	BATH	TILE	TILE 4'A.F.F.	TILE 4' A.F.F.	TILE 4' A.F.F.	TILE 4' A.F.F.	2X4	8'-6"	---	
105	ELEC.	EXIST'G	EXIST'G	EXIST'G	GYP. BD	EXIST'G	2X4	8'-6"	---	
106	ENTRY	VNYL	GYP.BD	GLASS	GLASS	GLASS	2X2	8'-6"	---	

DOOR AND FRAME SCHEDULE

MARK	DOOR			MATL	FRAME	NOTES
	WD	SIZE	THK			
01	3'-0"	6'-8"	1 3/4"	EXIST'G	EXIST'G	---
02	3'-0"	6'-8"	1 3/4"	WD	WD	Closure
03	3'-0"	6'-8"	1 3/4"	WD	WD	Closure
04	3'-0"	6'-8"	1 3/4"	EXIST'G	EXIST'G	---
05	3'-0"	6'-8"	1 3/4"	EXIST'G	EXIST'G	---
06	3'-0"	6'-8"	1 3/4"	GLASS	METAL	Closure

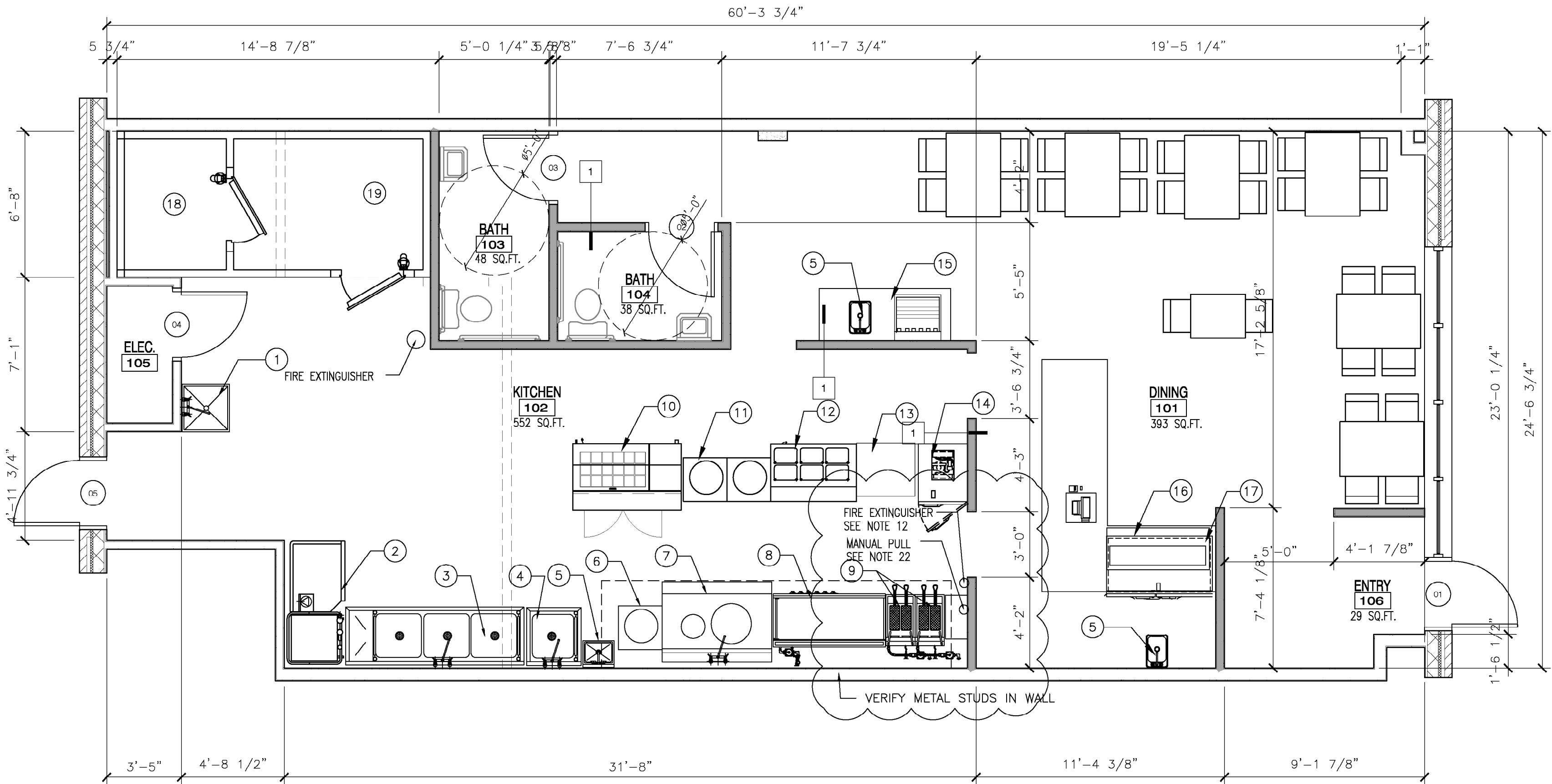


1 WALL TYPE

1. GYPSUM BOARD:

2. METAL STUDS:

3. INSULATION:
- 5/8 IN. THICK GYPSUM BOARD APPLIED VERTICALLY.
3 5/8 METAL STUDS, @16" O.C.
MIN. 3-1/2 IN. THICK FIBERGLASS. INSULATION



FLOOR PLAN

Scale 1/4"=1'-0"

EQUIPMENT SCHEDULE

1. MOP SINK

2. DISHWASHER

3. 3 COMPARTMENT SINK

4. SINGLE COMPARTMENT SINK

5. HAND SINK

6. RICE COOKER

7. CHINESE STOVE

8. GRIDDLE

9. FRYER (2 THUS)

10. REFRIGERATED PREP TABLE

11. RICE WARMERS

12. FOOD WELLS

13. STAINLESS STEEL TABLE

14. COKE REFRIGERATOR

15. SODA DISPENSER

16. SUSHI DISPLAY

17. UNDERCOUNTER REFRIGERATOR

GENERAL NOTES

1. All refrigeration units are capable of maintaining refrigerated foods at or below 41° Fahrenheit at all times. Reach-in refrigerators, prep refrigerators, refrigerated display cases, and freezers must be specifically constructed for commercial use.

2. This is a non-smoking establishment.

3. All cooking and food service equipment must be commercial grade and shall meet NSF Standards.

4. Adequate and suitable space has been provided for the storage of food. Approximately twenty-five percent (25%) of the food preparation area, and at least 32 linear feet of approved shelving for each 100 square feet of storage area are considered adequate (excluding refrigeration). Shelving is easily cleanable and durable. The lowest shelf of any shelving unit shall be at least six inches above the floor.

5. The floor surfaces, in all areas in which food is prepared, packaged, or stored, where any utensil is washed, where refuse or garbage is stored and where janitorial facilities are located, and in all toilet and hand washing areas, shall be smooth and of such durable construction and non-absorbent material as to be easily cleaned. Floor surfaces are covered at the juncture of the floor and wall, with a three-eighths inch (3/8") minimum radius coving.

6. Walls and ceilings of food preparation and utensil washing areas shall be light colored and constructed with materials that provide a durable, smooth, non-absorbent, washable surface. Conduits of all types shall be installed within walls as practicable. When otherwise installed, they are mounted or enclosed so as to facilitate cleaning.

7. The delivery door leading to the outside shall have a self-closing device.

8. The main entrance door leading to the outside shall have a self-closing device.Provide a sign on the main exit door that says "THIS DOOR MUST REMAIN UNLOCKED DURING BUSINESS HOURS" instead of panic hardware.

9. All floors, walls and ceilings in the kitchen, restrooms, food prep areas and storage areas will be smooth washable and nonabsorbent.

10. Install batt insulation in all interior walls for sound transmission.

11. Building address shall be posted in a conspicuous place during construction.

12. Fire extinguishers shall be installed in accordance with the International Fire Code and NFPA 10. Extinguishers shall be mounted 5 feet for 40 lbs or 3.5 feet for greater the 40 lbs above finished floor. Provide blocking in wall for mounting. A class "K" fire extinguisher shall be supplied in the kitchen, install extinguisher next to manual pull station.

13. Tactile "Exit" signs shall be placed at each Exit door. ADA required wall signage shall be placed on the latch side of single doors 9-inches center-line from the door edge. Tactile signs shall be installed 48-inches minimum and 60-inches maximum AFF to the baseline of the highest text.Tactile unisex toilet room signage shall be provided.

14. Verify existing dimensions before construction.

15. Hood system must have a current inspection tag and shall be cleaned upon final inspection.

16. Additional emergency lighting/exit signs may be required if upon final fire inspection it is determined there is not adequate lighting to show a clear path of egress.

17. Install towel and soap dispenser at all hand sinks

18. Use suspended ceiling with a flame spread rating of 25

20. All floors, walls and ceilings in the kitchen, restrooms, food prep areas and storage areas will be smooth washable and nonabsorbent.

21. Post occupant load signage of 29 near front door.

22. The manual actuation device shall be installed not more than 48 inches (1200 mm) nor less than 42 inches (1067 mm) above the floor and shall clearly identify the hazard protected. The manual actuation shall require a maximum force of 40 pounds (178 N) and a maximum movement of 14 inches (356 mm) to actuate the fire suppression system.

23. Verify installation of metal studs in wall behind and 18" adjacent to type I hood.

- Door Hardware:
- All doors required for egress (exit doors) shall be installed with approved hardware as listed below:
- a. Exit doors shall be operable from the inside without the use of a key or any special knowledge of effort. For exception on the main exterior exits.

b. Manually operated edge- or surface-mounted flush bolts and surface bolts are prohibited.

c. Handles, pulls, latches, locks and other operating devices on accessible doors shall be easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms and U-shaped mechanisms are acceptable designs.

INNOVATIVE DESIGN & RENOVATION

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TOKYO GRILLE

3528 S.W. MARKET ST. LEE'S
SUMMIT, 64082

date 10-21-21
drawn by R.E.S.
checked by 2-9-21
revised 1-26-22

sheet no.

A1

THE WORK includes new materials, fittings and accessories necessary for a complete functioning plumbing system. The Work also includes final connections to all equipment and equipment systems. All Work shall be in accordance with local codes or ordinances and subject to inspection.

COORDINATE with the Work of other Sections, equipment furnished by others, and with the constraints of the existing conditions of the Project Site.

PROVIDE all fittings, accessories, offsets, and materials necessary to facilitate the Plumbing system's functioning as indicated by the design and the equipment indicated.

VENTS: Provide a complete system of vent piping, consisting of schedule 40 PVC pipe, connectors and fittings. Combine the vent risers in the ceiling space and penetrate through the roof with flashing.

CLEANOUTS: Provide cleanouts at the end of each horizontal run, and at the base of all vertical waste and drain pipes. Cleanouts shall be of the same size as the pipes they serve.

SHUTOFF VALVES, with unions shall be provided at each hot and cold water connection to each plumbing fixture or equipment, at connections to existing piping systems, and at branches to groups of more than two fixtures, to facilitate isolation for repair or replacement. Valves shall be equal to Jenkins #90-T ball valve, chrome-finished bronze, Teflon seats and packing, 400 lb. W.O.G., solder end.

SUPPLIES AND TRAPS: Provide water sealed traps and/or supplies installed as close as possible to all plumbing fixtures, drains, and equipment items having a waste connection, or requiring water service. Exposed traps and supplies in exposed areas (including cabinet interiors) shall be chromium plated brass, with chrome plated escutcheon plates.

REPAIR DAMAGE to existing elements and restore to original conditions. Provide clean and sanitary conditions at the completion of the Work.

GUARANTEE the Work and the installation for one year after acceptance by the Owner.



HANDICAP WATER CLOSET – American Standard model #3351.511.020 Awall System with Everclean and Selectronic battery-powered flush valve elongated vitreous china toilet, 1.1 GPF Flushometer Toilet elongated bowl powerful direct feed siphon jet action 18" mounting bowl height, bolt caps, wall mounted, high efficiency, condensation free channel, fully glazed 2-1/8" wide rim, 16" seat height, 16" seat width, 16" depth. The Spud shall be Crane model 047007-0070A inlet 1.5" inlet. Recommended working pressure 25 psi at valve when flushing and 80 psi static. Use Selectronic Toilet flush valve battery powered 6065.111 universal sensor flush valve. Use CR-P2 Lithium Battery. The seat shall be Zoro #G820023 open front seat 18 3/8" without cover for elongated bowl.

TOILET PAPER DISPENSER - Install one standard dispenser next to each water closet. Units shall be white in color or match the tile in each bathroom. Install 19" above finished floor.

FLOOR DRAIN - Oatley Zoro #G6139217 Mfr # 42021 plastic drain cover with 6.75" overall diameter. Include trap. See drawings for exact locations.

BATH MIRROR - 24" x 48". Location one over each lavatory.

MOP SINK - Fiat model #MSB-2424 mop sink shall have 10" high walls. Factory installed drain body shall be stainless steel and designed to provide for a lead caulk or QDC-3 joint to a 2" drain pipe. A combination dome strainer and lint basket made from stainless steel shall be included. Include faucet #830-AA, backflow preventer, mop hanger, hose and hose bracket.

RPZ VALVE - EXISTING

THREE COMPARTMENT SINK - Stainless steel triple compartment sink. Compartment size is 24"x24"x13" deep. Install two splash mount faucets model #K-119 with 16 inch swing spout. Install basket type drain with continuous waste pipe to floor sink. A 2" gap must be formed between the bottom of the pipe and the floor sink. (3CS-1)

SINGLE COMPARTMENT SINK - Advance model 7-PS-50 stainless steel single compartment sink. Compartment size is 17.75"x15"x5" deep. Install one splash mount faucet model #K-121 gooseneck spout. Install basket type drain with continuous waste pipe. Use as hand sink in dishwashing and cooking areas. Install soap and towel dispensers at hand sink. (HS-1)

GREASE INTERCEPTOR

Use 100 lbs grease interceptor with a 50 gpm flow control. Unit shall be polyethylene material shall not be placed under the 3 compartment sink and or flush with the floor. The unit shall be cleaned out at once per week. The top shall have a nonskid polyethylene cover. The size is based on the size of the 3 compartment sink.
(3x24x24x13/1728x2.5=18.28 gpm)

VOLUME OF 3 COMPARTMENT SINK
 $= (24 \times 24 \times 13) \times 3 = 22,464 \text{ CU. IN.}$
 $= 22,464 / 1728 = 13 \text{ CU. FT.}$
 $7.31 \times 7.24 = 94.12 \text{ GAL.}$

FLOW RATE
94.12 / 2.5 = 37.64 GPM

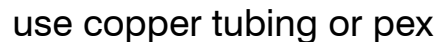
FLOW RATE < 50 GPM
USE 100 LB GREASE INTERCEPTOR

1. Use existing water service to existing building.
2. Supply and install all supply lines to each fixture.
3. Supply and install all wastewater plumbing with vents as required.
4. Supply and install new water heater.
5. Supply and install a valve on the main branch side to hot water heater.
6. Supply and install all fixtures in kitchen.
7. Use existing sanitary sewer line to the existing building.
8. The grease trap is new inside the building.
9. Supply and install all new floor drains.
10. Plumbing contractor shall supply all faucets for all fixtures.
11. Plumbing contractor is responsible for breakage of any plumbing units.
12. Use per the supply lines.
13. Use PVC schedule 40 for all sanitary lines.
14. Install approved backflow prevention of all beverage dispensers.

(FOR LAVS AND HAND SINKS)

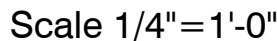
MARK	DESCRIPTION	QTY.	SIZE OF FIX. SUPPLY	WSFU			TOTAL		
				C	H	TOTAL	C	H	TOTAL
L	LAVATORY	2	1/2"	1.0	1.0	2.0	4.0	4.0	8.0
WC	WATER CLOSET	2	1/2"	2.5	—	2.5	5.0	—	5.0
HS	HAND SINK	3	1/2"	1.0	1.0	2.0	6.0	6.0	12.0
3CS	3 COMP. SINK	1	1/2"	2.0	2.0	4.0	2.0	2.0	4.0
MS	MOP SINK	1	1/2"	1.0	1.0	2.0	1.0	1.0	2.0
F	FLOOR SINK	1	—	—	—	—	—	—	—
FD	FLOOR DRAIN	3	—	—	—	—	—	—	—
CS	CHINESE SINK	1	1/2"	1.0	—	1.0	1.0	—	1.0
DF	DRINKING FOUNTAIN	1	1/2"	1.0	—	1.0	1.0	—	1.0
TOTAL							20.0	13.0	33.0

AVAILABLE PRESSURE : 35 PSI
MAXIMUM DEVELOPMENT LENGTH > 120 FT
SIZE OF MAIN SERVICE PIPE : ϕ 3/4"

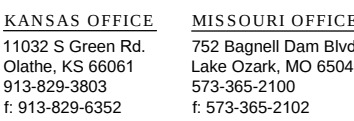
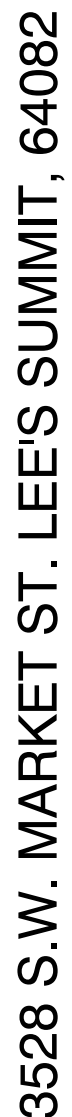


NO.	ITEM	BTUH
1	RICE COOKER	20,000
2	CHINESE STOVE	200,000
3	GRIDDLE	150,000
4	FRYERS (2 THUS)	240,000
5	WATER HEATER	199,000
6	STEAM TABLE	20,000
	TOTAL	829,000

MAX. DEVELOPED LENGTH > 100 FT
TOTAL GAS DEMAND IN BTU PER HOUR = 829,000 BTUH
TOTAL GAS DEMAND IN CU. FT. PER HOUR = 829,000/1100 = 753.46 CFH
ALLOWABLE PRESSURE DROP IS 0.5" COLUMN OF WATER
MIN. SIZE OF GAS LINE REQUIRED = 2"Ø



Architectural Engineering Consortium, Inc. assumes design responsibility for this project for only the mechanical, electrical and plumbing disciplines with drawing sheet number beginning with M, E and P. All other drawings should be considered the work of others. Further, drawings in this project set may contain drawing information, including but not limited to: architectural plans, sections and elevations, site plans and surveys and other information pertinent to showing the mechanical, plumbing and electrical work which is furnished by others, generally indicated by screened or light type. Architectural Engineering Consortium, Inc. assumes no responsibility for the design of the building structure, including but not limited to: structural steel, concrete, masonry, wood, etc. shown on MEP drawings. Architectural Engineering Consortium, Inc. assumes responsibility only for the design of mechanical, electrical and plumbing disciplines contained herein, generally indicated in bold type.



Date:	Issued for:
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A blank coordinate plane with a horizontal x-axis and a vertical y-axis intersecting at the origin. The axes are represented by thin black lines.

Project number:

Drawn: _____

RES

10-21-21

Sheet Number:

P1

THE WORK includes materials, fixtures, devices and accessories necessary for a complete functioning electrical system. All Work shall be in accordance with local codes or ordinances and subject to inspection.

COORDINATE with the Work of other Sections, make all connections to equipment furnished by others, and with the constraints of the existing conditions of the Project Site.

VERIFY voltage drops and A.I.C. ratings for all equipment connected, and verify size of electrical system breakers, conduit, etc. as necessary.

PANELBOARDS shall be as manufactured by Square D or equal, meeting U.L. Standards 50 and 67, with U. L. label. Use equipment provided by owner where possible.

CABINETS shall be one piece code gauge galvanized steel with mounting studs, wiring gutters of ample size and knockouts for conduit connections as required. Bus bars shall be 98% conductive copper, aluminum, or copper-clad aluminum. Fronts shall be one piece code gauge furniture steel with adjustable fasteners. Provide flush mount units unless otherwise indicated. Provide a plastic covered typewritten schedule identifying all branch circuits inside each cabinet.

CONDUIT shall be sized to comply with NEC for number and size of conductors installed, minimum 1/2" above grade. Provide Schedule 40 PVC plastic or rigid steel conduit below grade, minimum 3/4". Provide electrical metal tubing (EMT) meeting FS W-C563, Armour cable, or flexible conduit (in lengths 6' or less) for interior locations. EMT connectors and couplings 2" and smaller shall be set-screw type. Clamp conduit to boxes with bushing inside and locknut outside.

#10 and smaller:	THW, THWN or THHN
#8 to #4/0:	THW or THHN
Over #4/0 ordinary service:	THW
Over #4/0 wet or hot service:	THW
Service Entrance:	THW
Wire through Fluorescent fixture channels or within 3 feet of heating equipment:	THHN

LIGHT FIXTURES: Provide fixtures with lamps as indicated on Drawings. Provide fixture hickey, suspension nipples and splice fixture wiring to outlet box wiring as required. Provide trim to fit each ceiling condition encountered, notwithstanding model numbers indicated in Fixture Schedule.

CONCEAL WIRING SYSTEM above suspended ceilings or in wall or floor construction where possible. Install conduit parallel to building lines, and to clear all openings, depressions, pipes, ducts, structure, etc.

ADJUSTING AND TESTING: All electrical equipment shall be adjusted and tested for proper operation. Completed wiring system shall be free from short circuits.

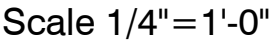
TOUCH-UP or refinish damaged surfaces of fixtures and equipment, exposed to view.

INSTALL CONDUIT continuous between boxes and cabinets with no more than three (3) 90 degree bends. Securely fasten in place with straps, hangers and steel supports as required. Do not support conduit from suspended ceiling grid or suspension wires. Ream conduit ends before installation and thoroughly clean before installation. Openings shall be plugged or covered to keep conduit terminals on switches and outlets shall not be used to "feed thru" to the next switch or outlet. The disconnection or removal of a receptacle, fixture, or other device fed from a box shall not interfere with or interrupt the conductor continuity.

CLEAN all fixtures, glassware and lamps, ready for use

1. Supply and install telephone jacks.
2. Use copper wire for all circuits. The panel supply wire shall be copper.
3. All outlets within 6 feet of a sink must be GFI protected.
4. All main feeders from the transformer to the meter are new.
5. The exterior lighting shall be controlled with a motion detector which detects movement within 50' of building and a photocell.
7. The fault current at the transformer is 10,000 amps.
8. The overcurrent protection at the main breaker is 100,000 A.I.C.

EQUIPMENT CONNECTION SCHEDULE				
ITEM NO	DESCRIPTION	VOLTAGE	LOAD	DISCONNECT DEVICE AT UNIT
1	MERCHANDISE FRIDGE	115V/1	6.8 AMPS	CORD AND PLUG
2	PREP TABLE	115V/1	7.2 AMPS	CORD AND PLUG
3	DISHWASHER	208/3	20 AMP	DIRECT CONNECTION
4	RICE WARMERS	115V/1	5.3 AMPS	CORD AND PLUG
5	UNDERCOUNTER FRIDGE	115/1	7 AMPS	CORD AND PLUG
6	SUSHI DISPLAY	115/1	5 AMPS	CORD AND PLUG
8	WALK IN COOLER	115/1	12.9 AMPS	DIRECT CONNECTION
9	WALK-IN FREEZER	208/60/3	40 AMPS	DIRECT CONNECTION
10	SODA & ICE MAKER	208/2	26 AMPS	DIRECT CONNECTION



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