				WATE	R	
MARK	FIXTURE/EQUIPMENT	QUANTITY	CW F.U. PER FIXTURE	HW F.U. PER FIXTURE	TOTAL WSFU PER TYPE	TOTAL F.U. PER FIXTURE
LAV	LAVATORY	4	1.5	1.5	2.0	8.0
HWC	WATER CLOSET (ADA)	4	10.0	-	10.0	40.0
НВ	HOSE BIBB	1	2.25	-	2.25	2.25
1	SODA SYSTEM	1	1.0	-	1.0	1.0
10	MOP SINK	1	2.25	2.25	3.0	3.0
32.1	3 COMP SINK PRE-RINSE	1	2.0	2.0	3.0	3.0
32.2	3 COMP SINK FAUCET	1	2.0	2.0	3.0	3.0
38	WAREWASHER	1	-	3.0	3.0	3.0
42	HAND SINK	1	1.5	1.5	2.0	2.0
46	DROP-IN, WATER & ICE STA.	1	0.5	-	0.5	0.5
47	COFFEE/TEA BREWER	2	0.5	-	0.5	1.0
48	DRINK DISPENSER	1	0.5	-	0.5	0.5
49	ICE MAKER	1	1.0	-	1.0	1.0
56	HAND SINK	1	1.5	1.5	2.0	2.0
57.1	2 COMP SINK FAUCET	1	2.0	2.0	3.0	3.0
B2	UNDERBAR 4 COMP SINK	1	2.0	2.0	3.0	3.0
В3	UNDERBAR HAND SINK	1	1.5	1.5	2.0	2.0
		TOTALS		23.75		78.25

GAS DEMAND LOAD CALCULATIONS						
MARK	FIXTURE/EQUIPMENT	QUANTITY	UNIT DEMAND BTUH	TOTAL DEMAND BTUH	TOTAL MBH	CONNECTION PIPE SIZE
RTU-1	ROOFTOP UNIT	1	120,000	120,000	120.0	3/4"
RTU-2	ROOFTOP UNIT	1	150,000	150,000	150.0	3/4"
RTU-3	ROOFTOP UNIT	1	150,000	150,000	150.0	3/4"
WH-1	WATER HEATER	1	199,900	199,900	199.9	3/4"
WH-2	WATER HEATER	1	199,900	199,900	199.9	3/4"
15	RANGE	1	158,000	158,000	158.0	3/4"
16	GRIDDLE	1	150,000	150,000	150.0	3/4"
18	RANGE	1	256,000	256,000	256.0	1"
19	CONVECTION OVEN	1	54,000	54,000	54.0	3/4"
21A	FRYER	1	160,000	160,000	160.0	3/4"
21B	FRYER	1	140,000	140,000	140.0	3/4"
26	HOT FOOD TABLE	1	25,000	25,000	25.0	1/2"
			TOTAL	1,762,800	1762.8	
3" G/	AS LINE REQUIRED BASED ON 15 BASED ON 2021 INTERNATIONAL					SI

SIZING, 402.2 MAXIMUM GAS DEMAND, TABLE 402.4(2) SCHEDULE 40 METALLIC PIPE.

	CLEANOUT SCHEDULE							
MARK	DUTY TYPE	MANUFACTURER	MODEL	CLEANOUT TYPE	FULL LINE (SIZE)	DUTY LOCATION		
<u>FCO</u>	FLOOR	ZURN	ZN-1400	HEAVY DUTY C. I. TOP W/BRONZE PLUG	4"	GENERAL		
<u>WCO</u>	WALL	ZURN	Z-1446	CAST BRONZE W/STAIN. STEEL COVER	4"	GENERAL		
<u>ECO</u>	EXTERIOR	ZURN	Z-1474	DURI-COATED C. I. COVER W/INTERNAL C.O.	4"	GENERAL		
NOTES: A. APPI	A ARRON FOLIAL OLD CAUTH LOCAM							

	DRAIN SCHEDULE								
MARK	DUTY TYPE	MANUFACTURER	MODEL	DRAIN GRATE TYPE	DRAIN BODY SIZE	P-TRAP PIPE SIZE	NOTES		
HD	HUB DRAIN	ZURN	ZN 415I-U-P 1/2"	6" ROUND NICKEL BRONZE	3"	3"	A, C		
FD	FLOOR	ZURN	ZN 415B-P 1/2"	6" ROUND NICKEL BRONZE	3"	3"	Α		
FS	FLOOR	ZURN	Z 1900	12"x12" - FULL GRATE. PROVIDE ALUM. SEIDMENT BUCKET	4"	4"	A, D		
NOTES									

B. PROVIDE ALL HORIZONTAL PIPING WITH 2" THICK FIBERGLAS INSULATION WITH ASJ JACKET ABOVE CEILING.

SANITARY SEWER LOAD CALC.						
MARK	FIXTURE/EQUIPMENT	QUANTITY	WASTE F.U. PER FIXTURE	TOTAL F.U. PER FIXTURE		
LAV	LAVATORY	4	1.0	4.0		
HWC	WATER CLOSET (ADA)	4	4.0	16.0		
FD	FLOOR DRAIN	5	2.0	10.0		
42	HAND SINK	1	2.0	2.0		
56	HAND SINK	1	2.0	2.0		
			TOTALS	34.0		
MA	XIMUM WASTE DEMAND AT	34.0 F.U. = 4'	' SANITARY SEW	ER WASTE		

FIXTURE UNITS BASED ON 2021 SOUTH CAROLINA PLUMBING CODE

A. PROVIDE ALL FLOOR DRAINS WITH TRAP PRIMERS & DEEP SEAL TRAPS.

C. PROVIDE WITH 2 INCH HIGH EXTENSION ADAPTER.

D. FIELD MODIFY GRATE AS REQUIRED FOR INDIRECT WASTE.

B. ALL EQUIPMENT FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR.

	GREASE WASTE LOAD CALC.							
MARK	FIXTURE/EQUIPMENT	QUANTITY	GREASE F.U. PER FIXTURE	TOTAL F.U.				
FS	FLOOR SINK	8	6.0	48.0				
FD	FLOOR DRAIN	5	2.0	10.0				
39	TROUGH DRAIN	1	6.0	6.0				
51	TROUGH DRAIN	1	6.0	6.0				
10	MOP SINK	1	2.0	2.0				
	TOTAL 72.0							
N	IAXIMUM WASTE DEMANI	O AT 72.0 F.U.	= 4" GREASE WA	STE				

	PLUMBING FIXTURE SCHEDULE						
MARK	FIXTURE	MANUFACTURER MODEL	DESCRIPTION				
HWC	WATER CLOSET (ADA)	KOHLER HIGHCLIFF K-96057	ELONGATED BOWL, 1-1/2" TOP SPUD, FLOOR MOUNTED, WHITE VITREOUS CHINA, KOHLER MODEL K-4670C LUSTRA SEAT, BOLT CAPS, SLOAN REGAL #111 FLUSH VALVE, 1.6 GPF. CONTRACTOR TO VERIFY THE FIXTURE WITH CODE REQUIREMENTS PRIOR TO INSTALLATION.				
LAV	WALL HUNG LAVATORY	KOHLER GREENWIC H K-2030	WALL MOUNT. PROVIDE KOHLER K-7443 FAUCET WITH K-16012-5 TRITION WRIST BLADE HANDLES, GRID STRAINER AND TAIL-PIECE AND MCGUIRE MODEL 170, CHROME PLATED BRASS ANGLE SUPPLY STOPS, AND MCGUIRE MODEL B8902 CHROME PLATED BRASS P-TRAP WITH C.O., 17 GA. 1-1/2" INLET AND OUTLET, BRASS SLIP NUTS AND CHROME PLATED ESCUTCHEON PLATE. INSTALL TRAP WRAP ON EXPOSED PIPE. TRUEBRO MODEL 102E-Z WITH 105-K AND PROVIDE OFFSET DRAIN. PROVIDE ZURN - Z1231 CONCEALED ARM CARRIER.				
НВ	HOSE BIBB	WOODFORD MODEL B65	CHROME PLATED WALL FAUCET WITH COLD SUPPLY, WALL BOX, SELF DRAINING, VACUUM BREAKER, LOOSE TEE KEY.				
TMV	THERMOSTATIC MIXING VALVE	LEONARD TA-LF-F	THERMOSTATIC MIXING VALVE, DURA-TROL SOLID BIMETAL THERMOSTAT. INTERNAL PARTS MADE OF BRASS, BRONZE AND STAINLESS STEEL. INTEGRAL WALL SUPPORT, CAST LEVER HANDLE, COMBINATION CHECK STOPS, HOT-COLD WITH DIRECTIONAL INDICATORS, HIGH TEMPERATURE LIMIT STOP, 1/2" INLET/OUTLET. APPROVED EQUALS: SYMMONS, WATTS.				
ET	EXPANSION TANK	AMTROL ST-25V	WELDED STEEL TANK, BUTYL DIAPHRAM, LINED FOR CORROSION RESISTANCE, WITH AIR CHARGE FITTING AND BRASS THREADED CONNECTION. APPROVED EQUALS: AMES, FEBCO, WILKINS, WESSELS.				
BFP	BACKFLOW PREVENTER	WATTS SERIES 909	2-1/2" REDUCED PRESSURE BACKFLOW PREVENTER. THE ASSEMBLY SHALL INCLUDE TWO TIGHTLY CLOSING FULL PORT SHUT-OFF VALVES BEFORE AND AFTER THE DEVICE, TEST COCKS, BRONZE STRAINER UPSTREAM OF FIRST VALVE AND WATTS 909AG AIR GAP. RUN DRAIN LINE TO NEAREST FLOOR DRAIN OR HUB DRAIN.				
BFP-1	BACKFLOW PREVENTER	WATTS SERIES LF7	FOR ICE MAKERS, COFFEE MAKERS, ESPRESSO MACHINE. DUAL CHECK VALVES.				
RCP	HOT WATER RECIRC PUMP	B&G MODEL PL-36B	BRONZE BOOSTER PUMP, 115V/SINGLE PHASE, 1/6 HP MOTOR, 25 GPM @ 15 FT. HEAD.				

MARK	FIXTURE/EQUIPMENT	DOMESTIC COLD WATER	DOMESTIC HOT WATER	SEWER	VEN
LAV	LAVATORY	1/2"	1/2"	1-1/2"	2"
HWC	WATER CLOSET (ADA)	1"	-	4"	2"
FD	FLOOR DRAIN	-	-	3"	2"
FS	FLOOR SINK	-	-	4"	2"
WCO	WALL CLEANOUT	-	-	4"	-
FCO	FLOOR CLEANOUT	-	-	4"	-
НВ	HOSE BIBB	1/2"	-	-	-
1	SODA SYSTEM	1/2"	-	-	-
10	MOP SINK	1/2"	1/2"	2"	2"
32.1	3 COMP SINK PRE-RINSE	1/2"	1/2"	-	-
32.2	3 COMP SINK FAUCET	1/2"	1/2"	(3)1-1/2" IW	-
38	WAREWASHER	-	3/4"	2" IW	-
42	HAND SINK	1/2"	1/2"	1-1/2"	2"
46	DROP-IN, WATER & ICE STA.	1/2"	-	1" IW	-
47	COFFEE/TEA BREWER	1/2"	-	-	-
48	DRINK DISPENSER	1/2"	-	3/4" IW	-
49	ICE MAKER	1/2"	-	3/4" IW	-
56	HAND SINK	1/2"	1/2"	1-1/2"	2"
57.1	2 COMP SINK FAUCET	1/2"	1/2"	(2)1-1/2" IW	-
B2	UNDERBAR 4 COMP SINK	1/2"	1/2"	(4)1-1/2" IW	-
ВЗ	UNDERBAR HAND SINK	1/2"	1/2"	1-1/2" IW	-
26	HOT FOOD TABLE	-	-	1" IW	-
39	TROUGH DRAIN	-	-	4"	-
51	TROUGH DRAIN	-	-	4"	-
B4	UNDERBAR DRAINBOARD	-	-	1" IW	-
B6	UNDERBAR ICE CHEST	-	-	1" IW	-
B16	DRIP TROUGH	-	-	1/2" IW	-

MARK	FIXTURE	MANUFACTURE MODEL	R	DESCRI	PTION		
HWC	WATER CLOSET (ADA)	KOHLER HIGHCLIFF K-96057	CHINA, KOHLER MODEL K #111 FLUSH VALVE, 1.6 GF	ELONGATED BOWL, 1-1/2" TOP SPUD, FLOOR MOUNTED, WHITE VITRE CHINA, KOHLER MODEL K-4670C LUSTRA SEAT, BOLT CAPS, SLOAN RI #111 FLUSH VALVE, 1.6 GPF. CONTRACTOR TO VERIFY THE FIXTURE V CODE REQUIREMENTS PRIOR TO INSTALLATION.			
LAV	WALL HUNG LAVATORY	KOHLER GREENWIC H K-2030	WRIST BLADE HANDLES, MODEL 170, CHROME PLA MCGUIRE MODEL B8902 (GA. 1-1/2" INLET AND OUT ESCUTCHEON PLATE. INS MODEL 102E-Z WITH 105-I	WALL MOUNT. PROVIDE KOHLER K-7443 FAUCET WITH K-16012-5 TRIT WRIST BLADE HANDLES, GRID STRAINER AND TAIL-PIECE AND MCGUI MODEL 170, CHROME PLATED BRASS ANGLE SUPPLY STOPS, AND MCGUIRE MODEL B8902 CHROME PLATED BRASS P-TRAP WITH C.O., GA. 1-1/2" INLET AND OUTLET, BRASS SLIP NUTS AND CHROME PLATE ESCUTCHEON PLATE. INSTALL TRAP WRAP ON EXPOSED PIPE. TRUE MODEL 102E-Z WITH 105-K AND PROVIDE OFFSET DRAIN. PROVIDE ZU Z1231 CONCEALED ARM CARRIER.			
НВ	HOSE BIBB	WOODFORD MODEL B65	CHROME PLATED WALL F DRAINING, VACUUM BREA			LY, WALL BC	X, SELF
TMV	THERMOSTATIC MIXING VALVE	LEONARD TA-LF-F	THERMOSTATIC MIXING NINTERNAL PARTS MADE OF INTEGRAL WALL SUPPOR STOPS, HOT-COLD WITH LIMIT STOP, 1/2" INLET/OU	OF BRASS, BE T, CAST LEV DIRECTIONA	RONZE AND S ER HANDLE, L INDICATOR	STAINLESS S COMBINATIC S, HIGH TEM	TEEL. N CHECK PERATURE
ET	EXPANSION TANK	AMTROL ST-25V	WELDED STEEL TANK, BURESISTANCE, WITH AIR CONNECTION. APPROVE	HARGE FITTI	NG AND BRA	SS THREADE	ĒD
BFP	BACKFLOW PREVENTER	WATTS SERIES 909	2-1/2" REDUCED PRESSU SHALL INCLUDE TWO TIG BEFORE AND AFTER THE UPSTREAM OF FIRST VAL TO NEAREST FLOOR DRA	HTLY CLOSIN DEVICE, TES VE AND WAT	NG FULL POR ST COCKS, BF TS 909AG AII	T SHUT-OFF RONZE STRA	VALVES INER
BFP-1	BACKFLOW PREVENTER	WATTS SERIES LF7	FOR ICE MAKERS, COFFE VALVES.	E MAKERS, E	ESPRESSO M	ACHINE. DU	AL CHECK
RCP	HOT WATER RECIRC PUMP	B&G MODEL PL-36B	BRONZE BOOSTER PUMF 15 FT. HEAD.	P, 115V/SINGL	E PHASE, 1/6	HP MOTOR,	25 GPM @
		PLUM	IBING FIXTURE	CONN	IECTIO	N SCH	ED.
		MARK	FIXTURE/EQUIPMENT	DOMESTIC COLD WATER	DOMESTIC HOT WATER	SEWER	VENT
		LAV	LAVATORY	1/2"	1/2"	1-1/2"	2"

LUMBING SPECIFICATIONS

CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL CODES AND HEALTH REGULATIONS HAVING JURISDICTION. CONTRACTOR SHALL PAY ALL FEES AND PERMITS REQUIRED.

CONTRACTOR SHALL GUARANTEE INSTALLATION AGAINST DEFECTS IN WORKMANSHIP, EQUIPMENT AND MATERIAL FURNISHED ON PROJECT FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE. PROVIDE EXTENDED GUARANTEES FOR EQUIPMENT SUCH AS WATER HEATERS WHEN REQUIRED.

SUBMIT FOR APPROVAL THE NUMBER OF SHOP DRAWINGS AND MANUFACTURERS LITERATURE ON ALL PLUMBING FIXTURES & MATERIALS AS REQUIRED TO THE ARCHITECT OR OWNER'S REPRESENTATIVE.

CONTRACTOR SHALL VISIT THE JOB SITE AND EXAMINE PREMISES AT AND ADJACENT TO PROPOSED WORK. VERIFY EXISTING PIPE SIZES, LOCATION AND SUITABILITY FOR CONNECTION TO THE NEW SYSTEM PRIOR TO BID.

DRAWINGS ARE DIAGRAMMATIC AND INTEND TO SHOW APPROXIMATE LOCATION OF PIPING, FIXTURES, ETC. CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL, CIVIL, STRUCTURAL, ELECTRICAL AND MECHANICAL DRAWINGS AND COORDINATE WITH OTHER TRADES FOR PIPE ROUTING AND EQUIPMENT PLACEMENT. INSTALL ALL WORK WITHOUT CONFLICT WITH OTHER TRADES AND MAKE MINOR ALTERATIONS AS REQUIRED WITHOUT ADDITIONAL COST TO OWNER.

CONTRACTOR SHALL COOPERATE FULLY WITH OWNER IN SCHEDULING AND MAKING CONNECTIONS TO EXISTING SERVICE LINES SO AS TO CAUSE THE LEAST POSSIBLE INCONVENIENCE AND SHORTEST POSSIBLE INTERRUPTION OF SERVICE.

CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR ALL VOLTAGES, ELECTRICAL LOADS, ETC., OF ELECTRICALLY OPERATED EQUIPMENT PRIOR TO PURCHASING EQUIPMENT. ALL EQUIPMENT SHALL BE U.L. AND NEMA APPROVED.

MAINTAIN A MINIMUM CLEARANCE OF 3'-0" IN FRONT OF ALL ELECTRICAL PANELS AND 1'-0" EITHER SIDE OF PANEL TO STRUCTURE. ALL PIPING SHALL BE ROUTED AROUND THIS AREA.

CONTRACTOR SHALL FURNISH ACCESS PANELS, TO BE INSTALLED BY THE GENERAL CONTRACTOR, AS REQUIRED FOR PLUMBING INSTALLATIONS.

10. ALL SANITARY VENT ROOF PENETRATIONS SHALL BE A MINIMUM DISTANCE OF 10'-0" AWAY FROM ALL ROOFTOP MECHANICAL EQUIPMENT OR OTHER AIR INTAKE DEVICES.

11. ALL HORIZONTAL AND VERTICAL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS. SUPPORTS SHALL SECURELY HOLD PIPING, PREVENT VIBRATION, COMPENSATE FOR STATIC AND OPERATIONAL CONDITIONS OF THE VARIOUS SYSTEMS, AND SHALL NOT BE SUBJECT TO ELECTROLYTIC ACTION.

12. CONTRACTOR TO COORDINATE AND INSTALL, IF REQUIRED FOR THIS PROJECT, NEW WATER METER AS PER REQUIREMENTS OF LOCAL UTILITY COMPANY. CONTRACTOR SHALL INCLUDE ALL TAP FEES AND COSTS INTO BID FOR A COMPLETE INSTALLATION.

13. DOMESTIC WATER PIPING OUTSIDE OF THE BUILDING BURIED BELOW GRADE SHALL BE TYPE "K" SOFT COPPER. WATER PIPING PASSING THROUGH OR UNDER FOOTINGS OR FOUNDATION WALLS SHALL BE SLEEVED OR OTHERWISE PROTECTED. COPPER PIPING PASSING UNDER AND THROUGH CONCRETE SLAB SHALL BE PROTECTED BY A PROTECTIVE SHEATING OR WRAPPING TO PREVENT CORROSION TO THE COPPER PIPING.

14. ALL DOMESTIC HOT WATER AND COLD WATER PIPING ABOVE SLAB SHALL BE TYPE "L" HARD COPPER WITH WROUGHT COPPER FITTINGS USING "NO-LEAD" SOLDER. DOMESTIC WATER PIPING BELOW CONCRETE SLAB SHALL BE TYPE "K" SOFT COPPER. NO SOLDER JOINTS ARE ALLOWED BELOW CONCRETE SLAB. COPPER PIPING PASSING UNDER AND THROUGH CONCRETE SLAB OR WALLS SHALL BE PROTECTED WITH A PROTECTIVE SHEATING OR WRAPPING TO PREVENT CORROSION TO THE COPPER PIPING.

15. VALVES SERVING DOMESTIC WATER SYSTEMS SHALL BE BALL VALVES OR APPROVED EQUAL. ALL VALVES SHALL BE LOCATED SO AS TO BE ACCESSIBLE BY MAINTENANCE PERSONNEL.

16. PROVIDE 1" THICK FIBERGLASS PIPE INSULATION WITH SERVICE JACKET ON ALL DOMESTIC WATER PIPING. DOMESTIC COLD WATER PIPE INSULATION SHALL HAVE A CONTINUOUS VAPOR BARRIER.

17. ALL WATER PIPING SHOWN ROUTED IN EXTERIOR WALLS SHALL BE LOCATED INSIDE THE BUILDING INSULATION AND FINISHED WALL TO PREVENT FREEZE

18. CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND INVERT AT THE POINT OF CONNECTION TO THE SEWER SYSTEM BEFORE DETERMINING FINAL ROUTING OF SOIL, WASTE AND VENT PIPING.

19. ALL SOIL, WASTE AND VENT PIPING SHALL BE SERVICE WEIGHT HUB AND SPIGOT CAST IRON OR SCHEDULE 40 PVC DWV PLASTIC PIPE WHERE ALLOWED BY LOCAL AUTHORITY HAVING JURISDICTION FOR THIS INSTALLATION. PROVIDE 3M FIRE BARRIER CAULK CP-25 CAULKING, OR U.L. APPROVED EQUAL, AT ANY PENETRATION OF FIRE RATED ASSEMBLIES.

20. ALL SOIL, WASTE AND VENT PIPING SHALL BE UNIFORMLY GRADED AND SHALL HAVE A SLOPE OF NOT LESS THAN 1/4" PER FOOT FOR PIPING 3" IN DIAMETER AND SMALLER AND 1/8" PER FOOT FOR PIPE LARGER THAN 3" IN

21. NUMBER OF PLUMBING FIXTURES REQUIRED SHALL BE IN ACCORDANCE WITH THE 2021 SOUTH CAROLINA PLUMBING CODE 407. HANDICAP REQUIREMENTS SHALL BE IN ACCORDANCE WITH ANSI A117.1-2003.

	GAS FIRED WATER HEATER SCHEDULE							
ARK	LOCATION	MANUFACTURER	MODEL	TANK CAPACITY	INPUT (BTUH)	RECOVERY RATE (100°F RISE)	ELECTRICAL V/PH/HZ	NOTES
VH-1	MECHANICAL ROOM	A.O. SMITH	BTH-199	100 GALLON	199,900	235 GPH	REFER TO ELEC DRAWINGS	A THRU J
VH-2	MECHANICAL ROOM	A.O. SMITH	BTH-199	100 GALLON	199,900	235 GPH	REFER TO ELEC DRAWINGS	A THRU J
OTE	2.	_	_	_	•		_	

A. EQUIPMENT AND ALL ASSOCIATED WATER SIDE PIPING, VALVES, AND ACCESSORIES SHALL BE PROVIDED BY

PLUMBING CONTRACTOR. B. EQUIPMENT SHALL MEET ASHRAE 90.1 STANDARDS FOR THERMAL EFFICIENCY AND STANDBY LOSS. C. FURNISH CONCENTRIC VENT KIT FOR INSTALLATION BY MECHANICAL CONTRACTOR.

D. PROVIDE FACTORY INSTALLED TEMPERATURE AND PRESSURE SAFETY RELIEF VALVE (T&P VALVE). E. PLUMBING CONTRACTOR SHALL PROVIDE HARD COPPER DRAIN LINE FROM T & P VALVE DOWN TO AN APPROVED

RECEPTOR WITH AIR GAP. PIPING TO BE FULL SIZE OF T & P VALVE DISCHARGE CONNECTION. PROVIDE WATTS MODEL AS-30 ALL METAL STAND.

G. UNIT SHALL MEET SCAQMD RULE 1146.2 FOR LOW-NOx EMISSIONS.

H. DISCONNECT SWITCH TO BE PROVIDED BY ELECTRICAL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE INSTALLATION WITH ELECTRCIAL CONTRACTOR.

REFER TO GAS WATER HEATER DETAIL FOR ADDITIONAL INSTALLATION INFORMATION.

WATER HEATER TO BE SET @ 140 DEGREES F.

	PLUMBING SYN	MBOLS LEGEND
	PIPING	LEGEND
	→ DOMESTIC COLD W → FILTERED WATER -	
← − − − (E)CW−	→ EXISTING DOMESTI	C COLD WATER - (E)CW
— — — HW	→ DOMESTIC HOT WA	TER - HW - 110°F
— – – HW(140°F)— DOMESTIC HOT WA	TER - HW - 140°F
(E)HW -	— EXISTING DOMESTI	C HOT WATER - (E)HW
HWR-	→ DOMESTIC HOT WA	TER RETURN - HWR
- HWR(140°F	DOMESTIC HOT WA	TER RETURN - 140°F
(E)HWR-	—— EXISTING HOT WAT	ER RETURN - (E)HWR
	TEMPERED WATER	- TW
- TWR-	TEMPERED WATER	RETURN - TWR
	→ VENT PIPING ABOV	E FLOOR - V
— — — ·(E)V—	→ EXISTING VENT PIP	ING ABOVE FLOOR - (E)V
ss—	SANITARY SEWER I	PIPING - SS
(E)SS—	→ EXISTING SANITARY	SEWER PIPING - (E)SS
lW—	INDIRECT WASTE P	IPING - IW
PD-	PUMPED DISCHARO	GE PIPING - PD
 GW -	• GREASE WASTE PIF	PING - GW
<u> (E)GW-</u>	- → EXISTING GREASE	WASTE PIPING - (E)GW
ST	STORM DRAIN PIPIN	NG - ST
` ,	· EXISTING STORM D	. ,
	•	GENCY) STORM DRAIN PIPING - OST
		W (EMERGENCY) STORM DRAIN PIPING - (E)OST
•	CONDENSATE DISC	
, ,	EXISTING CONDENSFIRE PROTECTION	` '
	•	
` '	EXISTING FIRE PRO	,
	→ NATURAL GAS PIPIN	
, ,	→ NATURAL GAS PIPIN	, ,
, ,	→ NATURAL GAS PIPIN	
` '	— EXISTING NATURAL— COMPRESSED AIR	, ,
•	── COMPRESSED AIR I ── COMPRESSED AIR I	
•	→ EXISTING COMPRES	
SYMBO	_ LEGEND	ABBREVIATIONS
CON	NECT TO EXISTING	A AMPS AFF ABOVE FINISHED FLOOR

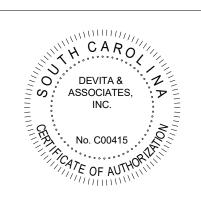
SYMBOL LEGEND		ABBREVIATIONS	
	CONNECT TO EXISTING	A AFF BFF	AMPS ABOVE FINISHED FLOOR BELOW FINISHED FLOOR
(#)	KITCHEN EQUIP. #	BFP	BACKFLOW PREVENTER
<u>XX-1</u>	FIXTURE / EQUIPMENT DESIGNATION	BOP BTU CD CFH	BOTTOM OF PIPE BRITISH THERMAL UNIT CONDENSATE DRAIN PIPING CUBIC FEET PER HOUR
OC—	FLOOR DRAIN	CI	CAST IRON CLEANOUT
_	HUB DRAIN	CTE	
	FLOOR/GRADE CLEANOUT	CW CWFU	COLD WATER (DOMESTIC) COLD WATER FIXTURE UNIT
_	WALL CLEANOUT	DFU	DRAINAGE FIXTURE UNIT
		DN ECO	DOWN EXTERIOR CLEANOUT
	P-TRAP	ELEV	ELEVATION
0—	PIPING TURNING UP	E / EX FCO	EXISTING FLOOR CLEANOUT
<u> </u>	PIPING TURNING DOWN	FD	FLOOR DRAIN
=	VENT THRU ROOF	FLA FOG	FULL LOAD AMPS FATS, OIL, AND GREASE
101	BALL VALVE	FPM	FEET PER MINUTE
→ ▼	GATE VALVE	FPS FS	FEET PER SECOND FLOOR SINK
-	PRESS. REDUCING VALVE	FT/'	FOOT / FEET
-1717-	BACKFLOW PREVENTER	FT FV	FLUSH TANK FLUSH VALVE
	STRAINER	G	GAS PIPING
- - -	UNION	GAL GPD	GALLON(S) GALLONS PER DAY
	WALL HYDRANT	GPH	GALLONS PER HOUR
	PIPE CAP	GPM GW	GALLONS PER MINUTE GREASE WASTE
		GW&T	GREASE WASTE AND TRAP
-	FLOW INDICATOR	HB HD	HOSE BIBB HUB DRAIN
	REDUCER	HP	HORSE POWER
-\$	T&P VALVE	HW HWFU HWR	HOT WATER (DOMESTIC) HOT WATER FIXTURE UNIT HOT WATER RETURN (DOMESTIC)
1	CHECK VALVE	Hz IN / " INV	HERTZ INCH / INCHES INVERT
$\langle \# \rangle$	KEY NOTE	IW	INDIRECT WASTE
		KW LRA	KILOWATT LOCKED ROTOR AMPS
		MBH MAX	THOUSAND BRITISH THERMAL UNITS MAXIMUM
		MIN	MINIMUM
		NC NEWH	NORMALLY CLOSED NON-FREEZE WALL HYDRANT
		NO	NORMALLY OPEN
		NTS OST	NOT TO SCALE OVERFLOW (EMERGENCY) STORM
		OSY	OUTSIDE SCREW AND YOKE
		PRV RD	PRESSURE REDUCING VALVE ROOF DRAIN
		RPM	REVOLUTIONS PER MINUTE
		RPZ SG	REDUCED PRESSURE ZONE SPECIFIC GRAVITY
		SS	SANITARY SEWER
		ST SQFT	STORM DRAIN SQUARE FEET
		TD	TRENCH DRAIN
		TDH TMV	TOTAL DYNAMIC HEAD THERMOSTATIC MIXING VALVE
		TOP	TOP OF PIPE
		TP V	TRAP PRIMER VOLTS
		VB	VACUUM BREAKER
		VIV VTR	VALVE IN VERTICAL VENT THRU ROOF
		W	WASTE
		W&T WC	WASTE AND TRAP WATER COLUMN
		WCO	WALL CLEANOUT
		l WH	WALL HYDRANT

(NOT ALL SYMBOLS ARE USED)

WHA WATER HAMMER ARRESTER

WSFU WATER SUPPLY FIXTURE UNIT









DP3 Architects, Ltd. 15 South Main Street, Suite 400 Greenville, SC 29601 864.232.8200 www.DP3architects.com

Project

MARIACHIS RESTAURANT LANCASTER, SC

23213

TLW

KFM

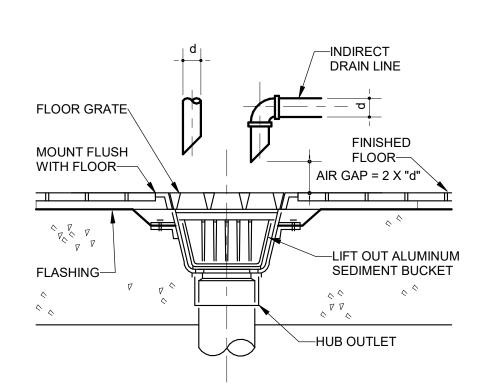
Issue Date

Project Number Drawn By

Revisions

Drawing

PLUMBING LEGEND, NOTES, AND SCHEDULES



1 FLOOR SINK - FS \setminus P0.2/ NOT TO SCALE

HOT WATER SUPPLY
PIPE TO FIXTURES 140°F—

BALL VALVE

5 THERMOSTATIC MIXING VALVE

UNION-

COLD INLET

TEMPERED

TEMPERED WATER TO

LAVATORY/HAND

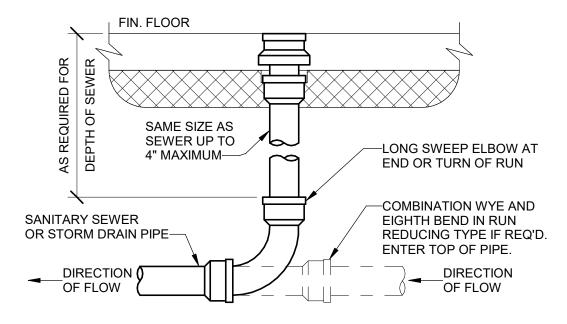
OUTLET-

COLD WATER

FIXTURES

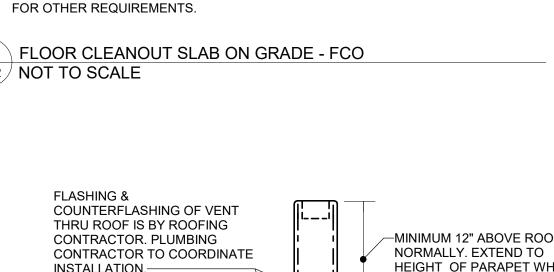
P0.2 NOT TO SCALE

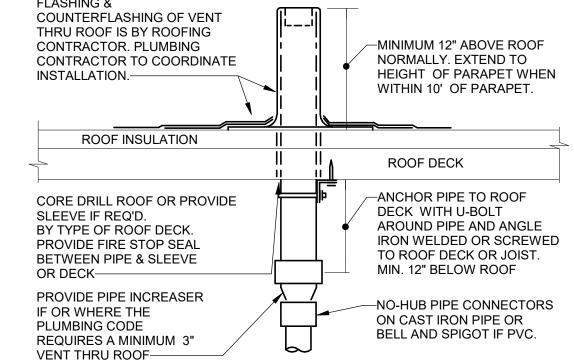
SUPPLY PIPE TO



ROUND SECURED GASKETED NICKEL BRONZE ADJUSTABLE TOP WITH "CO" CAST IN COVER. PROVIDE CLEANOUT TOP (HEAVY DUTY GRATE) WITH VARIATIONS SUITABLE FOR FLOOR COVERING (CARPET MARKER, RECESSED FOR TILE, SCORIATED FOR UNFINISHED FLOORS). PROVIDE GASKETED PLASTIC PLUG IN CAST IRON BODY. USE TEFLON JOINT COMPOUND ON PLUG THREADS. CLEAN THE TOP OF EXPOSED FCO AFTER INSTALLATION LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT 50' INTERVALS ON STRAIGHT RUNS, AND/OR WHERE SHOWN ON PLANS. PROVIDE BACKFILL PER ARCH. SPECIFICATIONS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND. CONSULT LOCAL CODES

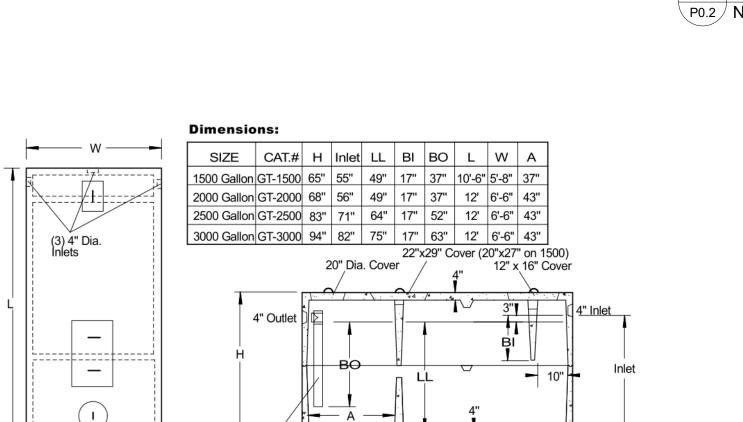
♥P0.2 NOT TO SCALE

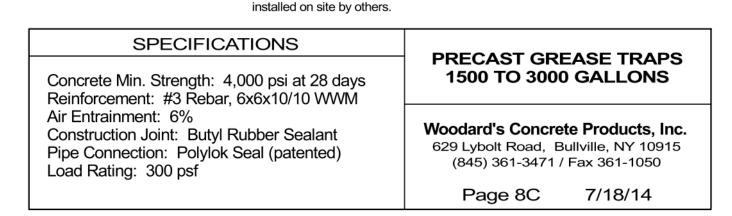




REFER TO PLANS FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR MIN. THREE FEET FROM PROPERTY LINE, OR TEN FEET HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, OR ONE FOOT FROM ANY VERTICAL SURFACE. LOCATE VTR MINIMUM 18" FROM PARAPET, EXPANSION JOINT, EQUIPMENT CURB, ETC. OFFSET IN CEILING SPACE WHERE REQUIRED TO MEET THESE CONDITIONS.







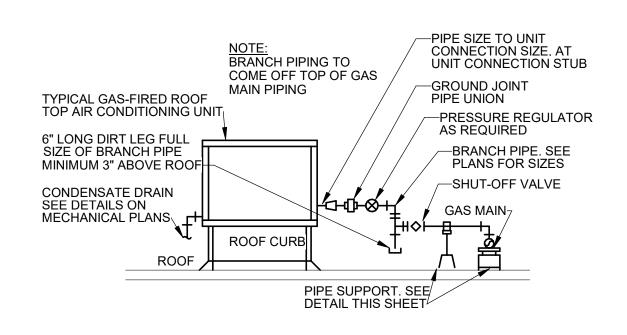
Outlet Tee Baffle

Side View



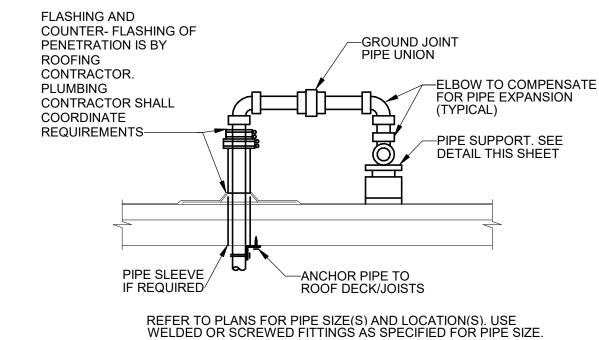
4" Dia. Outlet

Top View



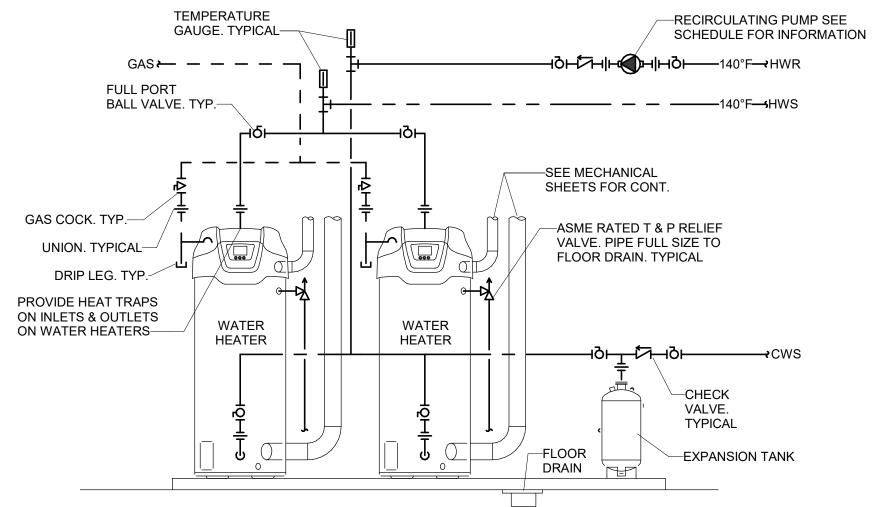
PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED TO SUIT ACTUAL CONDITIONS. CONDENSATE TRAP SHALL BE ROUTED TO AVOID INTERFERENCE WITH RTU MAINTENANCE ACCESS DOORS.





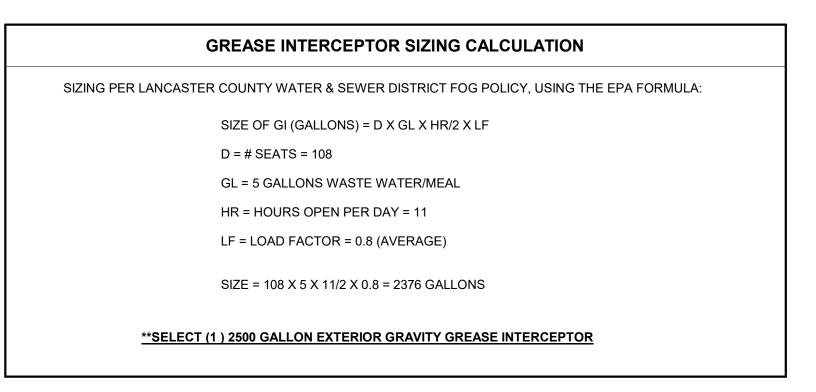
4 GAS PIPING ROOF PENETRATION

P0.2 NOT TO SCALE

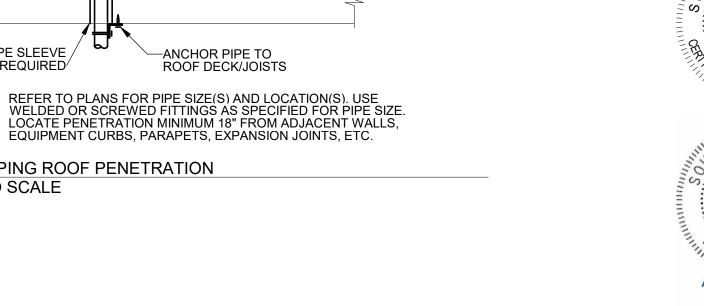


LOCATION OF VALVES, PUMPS AND PIPING ARE DIAGRAMMATIC ONLY AND MAY VARY FROM THAT SHOWN. COORDINATE VALVE INSTALLATION WITH MANUFACTURER. MIXING VALVE MUST BE INSTALLED AND MAINTAINED PER MANUFACTURER'S RECOMMENDATION.





10 GREASE INTERCEPTOR SIZING CALCULATION P0.2 NOT TO SCALE





www.devitainc.com 877.4.DEVITA

corp@devitainc.com

DeVita & Associates, Inc. Project: 23044

Drawn By: TLW Checked By: KFM

DEVITA & ASSOCIATES,

INC.

No. C00415

15 South Main Street, Suite 400 Greenville, SC 29601 864.232.8200 www.DP3architects.com

Project

MARIACHIS **RESTAURANT** LANCASTER, SC

23213

TLW

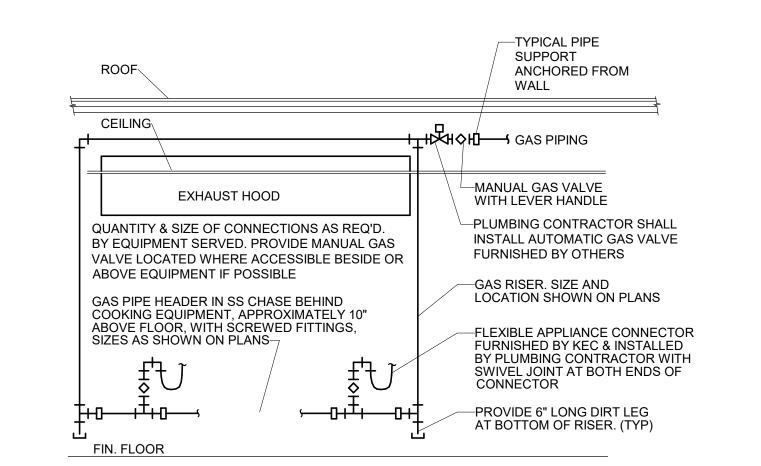
KFM

Project Number Drawn By Checked By Issue Date

Revisions

Drawing

PLUMBING DETAILS & G.I. SIZING



—ADJUSTING DIAL

-THERMOSTATIC MIXING VALVE

POINT OF USE, REFER TO

SPECIFICATIONS FOR MODEL.

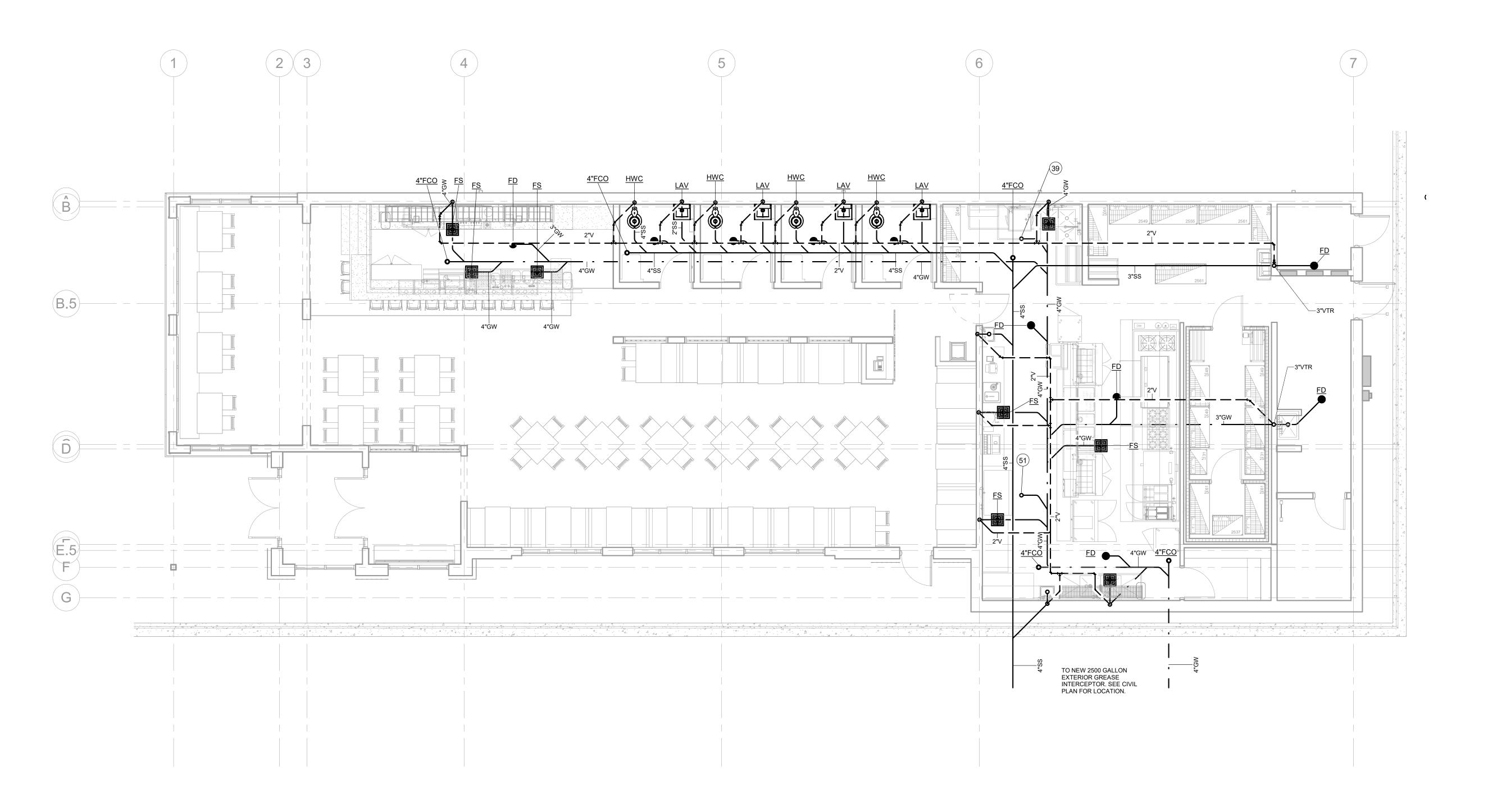
MIXING VALVE AND PIPING

LOCATED ABOVE CEILING OR

PROVIDE ANY GAS APPLIANCE PRESSURE REGULATORS REQUIRED, INSTALL ANY FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR. VERIFY ROUGH-IN REQUIREMENTS WITH KITCHEN EQUIPMENT CONTRACTOR. COORDINATE WITH ELECTRICAL CONTRACTOR. ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT ACTUAL CONDITIONS. MAKE FINAL CONNECTION TO EQUIPMENT AS RECOMMENDED BY MANUFACTURER. PROVIDE WELDED FITTINGS AND JOINTS IN ANY CONCEALED UNVENTILATED LOCATION.

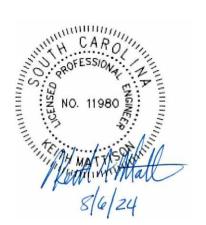
COOKING APPLIANCE GAS CONNECTION P0.2 NOT TO SCALE

1 PLUMBING PLAN - SANITARY WASTE & VENT P1.1 3/16" = 1'-0"











DP3 Architects, Ltd.

15 South Main Street, Suite 400
Greenville, SC 29601
864.232.8200
www.DP3architects.com

Proje

MARIACHIS RESTAURANT LANCASTER, SC

> 23213 TLW KFM Issue Date

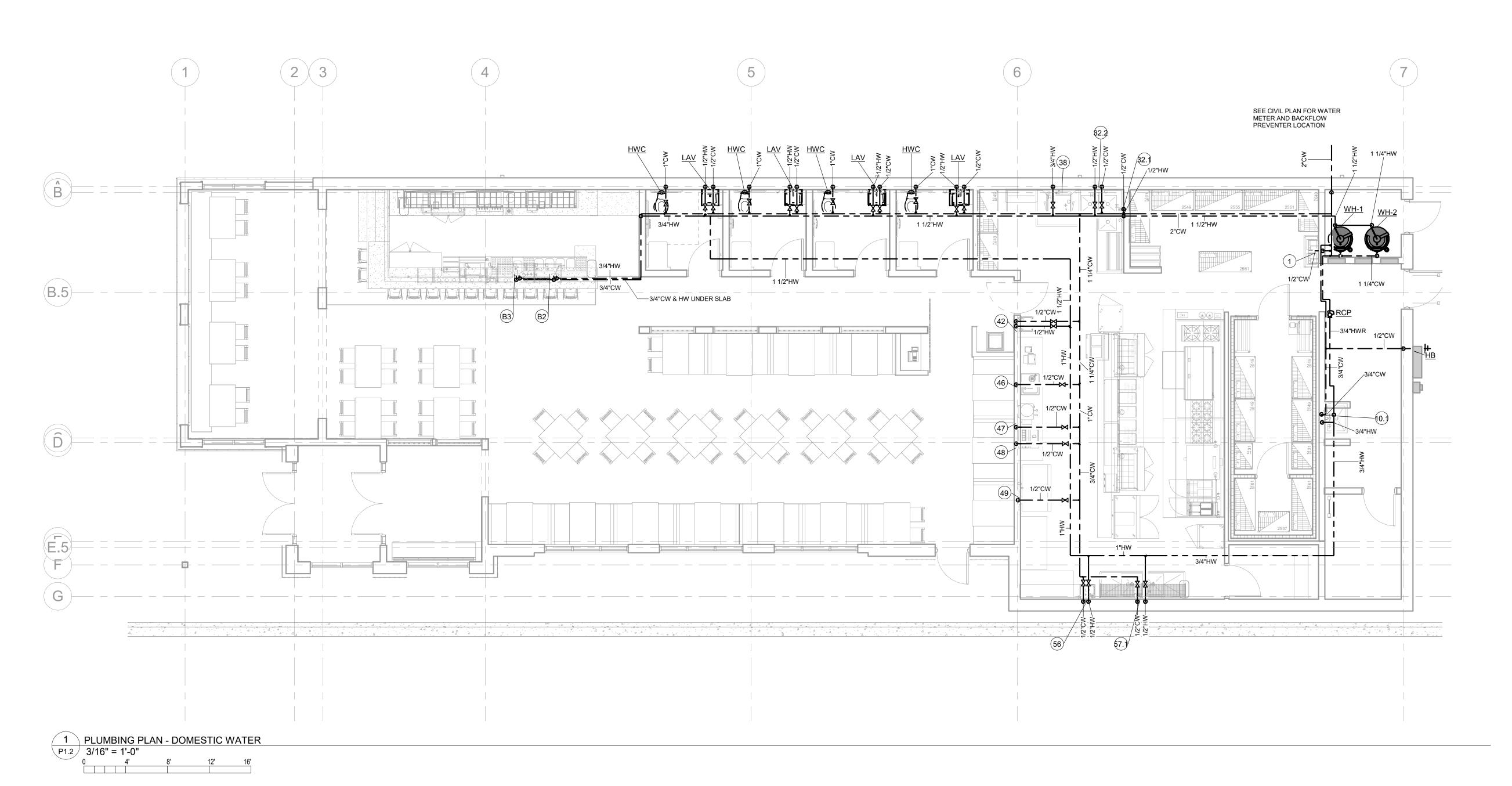
Project Number Drawn By Checked By

Revisions

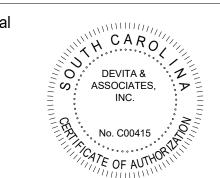
Drawing

PLUMBING SANITARY WASTE & VENT PLAN

P1.1











DP3 Architects, Ltd.

15 South Main Street, Suite 400
Greenville, SC 29601
864.232.8200
www.DP3architects.com

Proje

MARIACHIS RESTAURANT LANCASTER, SC

> 23213 TLW KFM Issue Date

Project Number Drawn By Checked By Date

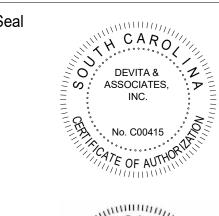
Revisions

Drawing

PLUMBING DOMESTIC WATER PLAN

P1.2









DP3 Architects, Ltd.

15 South Main Street, Suite 400
Greenville, SC 29601
864.232.8200
www.DP3architects.com

Proje



23213 TLW KFM Issue Date

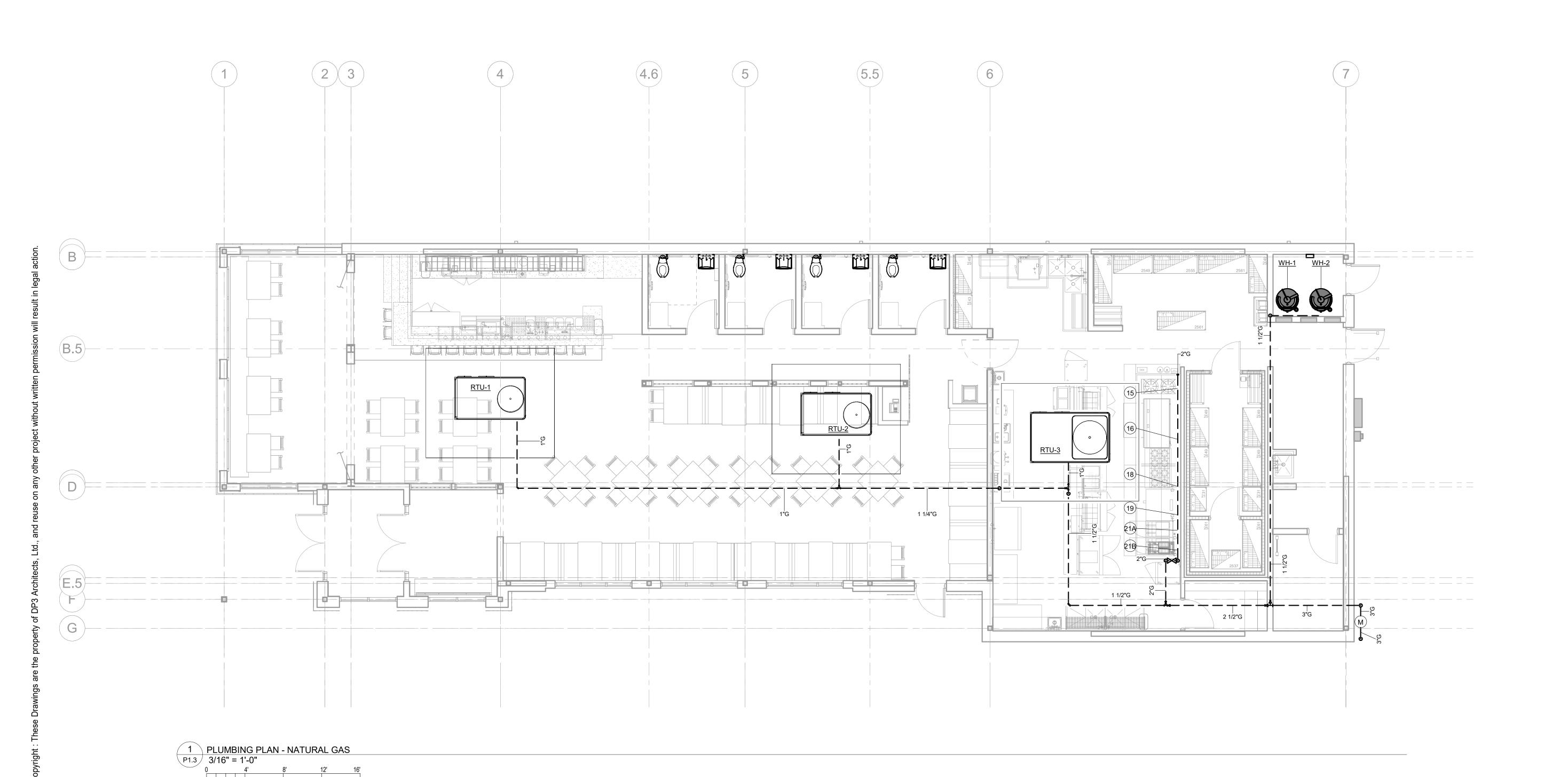
Project Number Drawn By Checked By Date

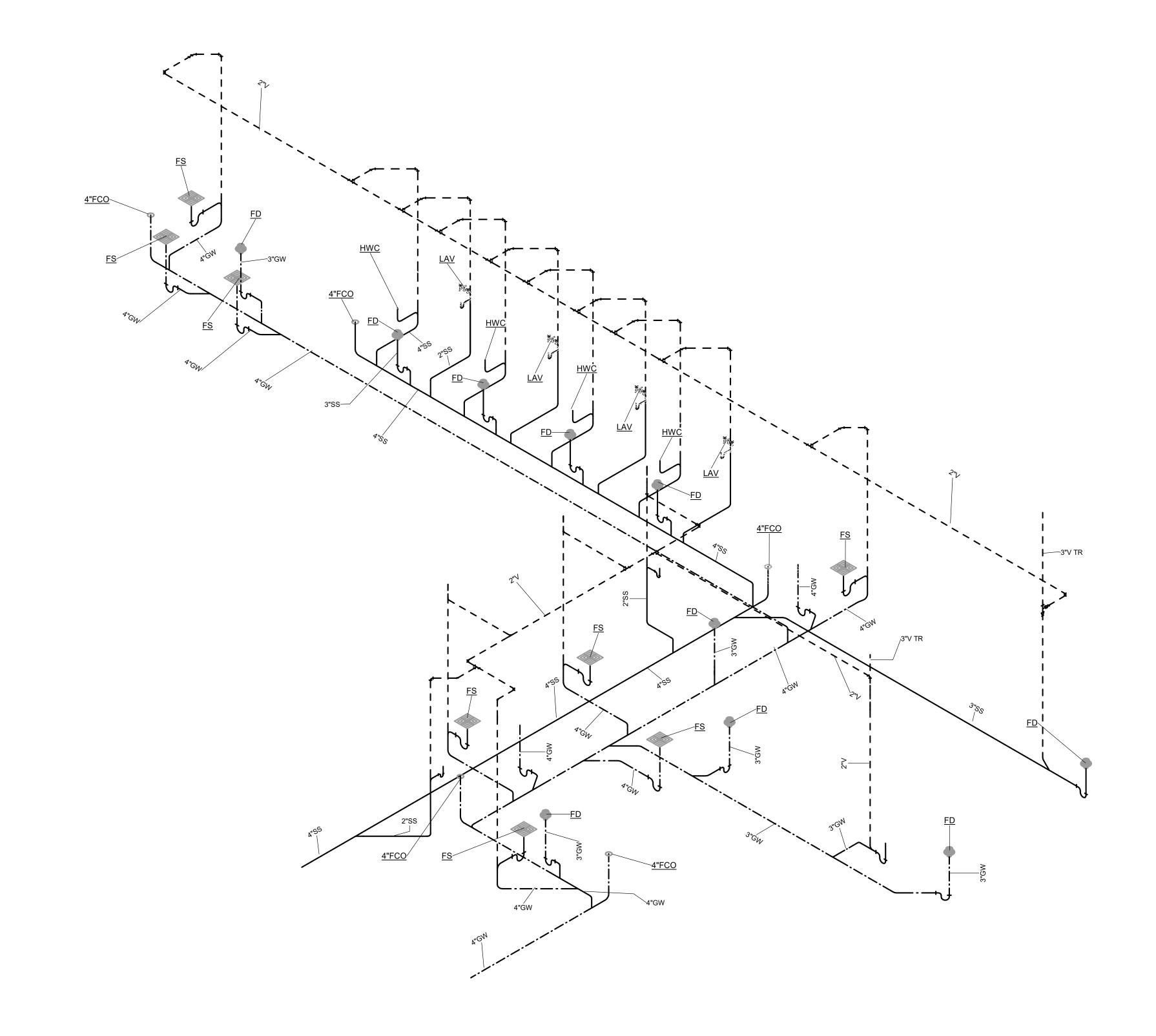
Revisions

Drawing

PLUMBING GAS PLAN

P1.3









Seal







DP3 Architects, Ltd.

15 South Main Street, Suite 400
Greenville, SC 29601
864.232.8200
www.DP3architects.com

Proje

MARIACHIS RESTAURANT LANCASTER, SC

> 23213 TLW KFM Issue Date

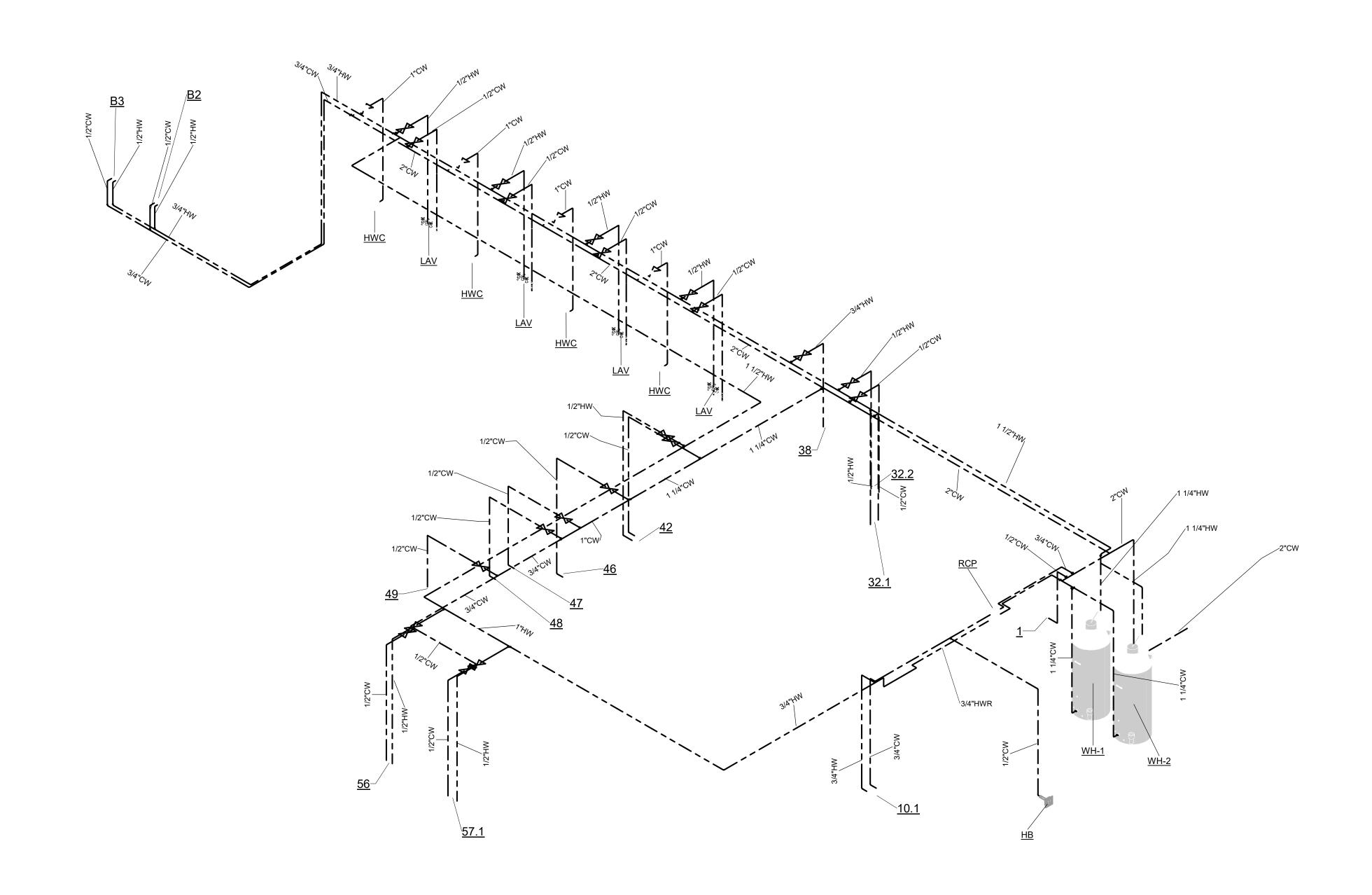
Project Number Drawn By Checked By Date

Revisions

Drawing

PLUMBING SANITARY RISER DIAGRAM

P2.1





Engineering Great Ideas

ATLANTA | CHARLOTTE | GREENVILLE | RICHMOND

WWW.devitainc.com

877.4.DEVITA

corp@devitainc.com

DeVita & Associates, Inc. Project: 23044

Drawn By: TLW Checked By: KFM



DP3 Architects, Ltd. 15 South Main Street, Suite 400 Greenville, SC 29601 864.232.8200 www.DP3architects.com

MARIACHIS RESTAURANT LANCASTER, SC

23213 TLW KFM Issue Date

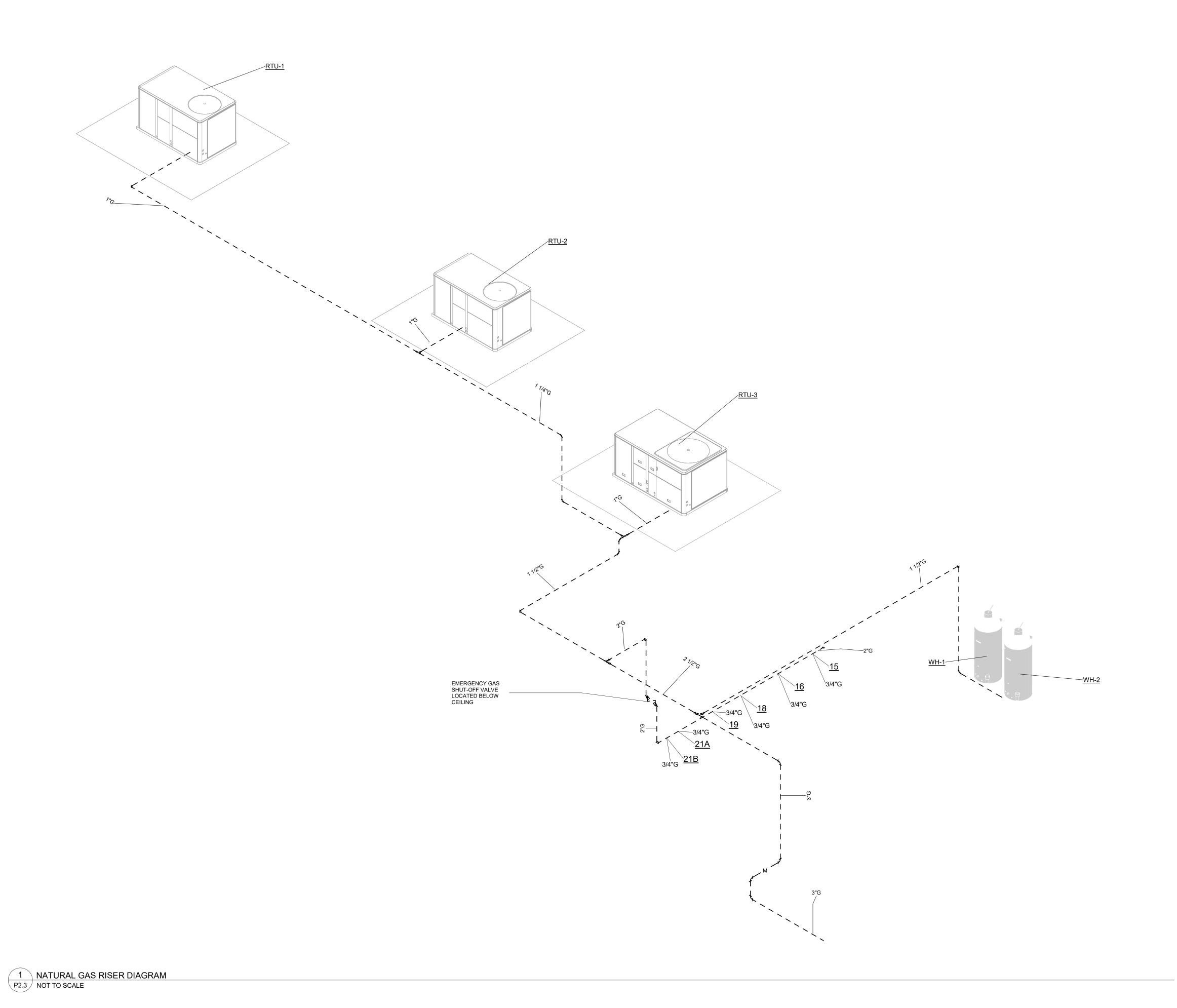
Project Number Drawn By Checked By Date

Revisions

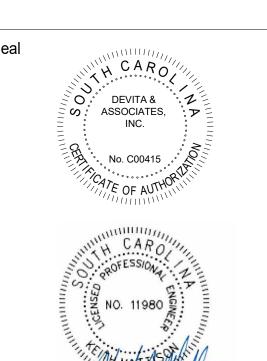
Drawing

PLUMBING DOMESTIC WATER RISER DIAGRAM

P2.2









DP3 Architects, Ltd. 15 South Main Street, Suite 400 Greenville, SC 29601 864.232.8200 www.DP3architects.com

MARIACHIS RESTAURANT LANCASTER, SC

23213 TLW KFM Issue Date

Project Number Drawn By Checked By Date

Revisions

Drawing

PLUMBING GAS RISER DIAGRAM

P2.3