

PLUMBING FIXTURE SCHEDULE	
MARK	DESCRIPTION
WC-1	WATER CLOSET: FLOOR MOUNT, VITREOUS CHINA, ELONGATED RIM, TOP SPUD, WHITE, 1.6 GALLONS PER FLUSH. TOP OF SEAT @ 17" HIGH, INTEGRAL TRAP, SIPHON JET ACTION, KOHLER "HIGHCREST" #K-4302. SEAT: EXTRA HEAVY DUTY OPEN FRONT LESS COVER FOR ELONGATED BOWL. STAINLESS STEEL CHECK HINGE WITH PVC WASHERS, METAL FLAT WASHERS, LOCK WASHERS AND STAINLESS STEEL NUTS. CENTOCO #500STSCC. VALVE: ELECTRONIC INFRARED SENSOR WITH TRIPPOINT TECHNOLOGY FOR ACCURATE ACTIVATION, FOUR 1.5 V AA BATTERIES INCLUDED, KOHLER #K-10957 (1.6 GALLONS PER FLUSH). INSTALL TO COMPLY W/ ADA REQUIREMENTS.
WC-2	WATER CLOSET: FLOOR MOUNT, VITREOUS CHINA, ELONGATED RIM, TOP SPUD, WHITE, 1.6 GALLONS PER FLUSH. TOP OF SEAT @ 17" HIGH, INTEGRAL TRAP, SIPHON JET ACTION, KOHLER "HIGHCREST" #K-4302. SEAT: EXTRA HEAVY DUTY OPEN FRONT LESS COVER FOR ELONGATED BOWL. STAINLESS STEEL CHECK HINGE WITH PVC WASHERS, METAL FLAT WASHERS, LOCK WASHERS AND STAINLESS STEEL NUTS. CENTOCO #500STSCC. VALVE: ELECTRONIC INFRARED SENSOR WITH TRIPPOINT TECHNOLOGY FOR ACCURATE ACTIVATION, FOUR 1.5 V AA BATTERIES INCLUDED, KOHLER #K-10957 (1.6 GALLONS PER FLUSH).
UR-1	URINAL: WALL HUNG, VITREOUS CHINA, WHITE, FLUSH VALVE TYPE, 1.0 GALLON PER FLUSH, INTEGRAL TRAP, TOP SPUD, SIPHON JET, KOHLER "DEXTER" #K-5016-ET. VALVE: ELECTRONIC INFRARED SENSOR WITH TRIPPOINT TECHNOLOGY FOR ACCURATE ACTIVATION, FOUR 1.5 V AA BATTERIES INCLUDED, KOHLER #K-10960(1.0 GALLON PER FLUSH) CARRIER: CONCEALED ARM, ZURN Z-1222. INSTALL PER ADA REQUIREMENTS.
UR-2	URINAL: WALL HUNG, VITREOUS CHINA, WHITE, FLUSH VALVE TYPE, 1.0 GALLON PER FLUSH, INTEGRAL TRAP, TOP SPUD, SIPHON JET, KOHLER "DEXTER" #K-5016-ET. VALVE: ELECTRONIC INFRARED SENSOR WITH TRIPPOINT TECHNOLOGY FOR ACCURATE ACTIVATION, FOUR 1.5 V AA BATTERIES INCLUDED, KOHLER #K-10960(1.0 GALLON PER FLUSH) CARRIER: CONCEALED ARM, ZURN Z-1222. INSTALL PER ADA REQUIREMENTS.
L-1	LAVATORY: COUNTER MOUNTED, WHITE VITREOUS CHINA, 20" x 18", WHITE, FRONT OVERFLOW, FAUCET HOLES ON 4" CENTERS, KOHLER #K-2905. FAUCET: DECK MOUNTED 4" CENTERSET, POLISHED CHROME PLATED FINISH, METAL LEVER HANDLE, CERAMIC MIXING CARTRIDGE, TEMPERATURE LIMIT STOP, TOTAL LEAD CONTENT LESS THAN 0.25% BY WEIGHTED AVERAGE, CHICAGO #420-CP. CHROME GRID STRAINER WASTE, CHICAGO #327-X. PROVIDE SUPPLIES & ANGLE STOPS, BRASS CRAFT #0CR145A. PROVIDE PROFLOW TRAP & HW SUPPLY COVER, MODEL #P203WH. PROVIDE COUNTER MOUNTED SOAP DISPENSER, BRASS CONSTRUCTION, 16 FLUID OUNCES, REFILLABLE FROM ABOVE, KOHLER #K-1495. INSTALL TO COMPLY W/ ADA REQUIREMENTS.
KS-1	SINK: COUNTER MOUNTED, 19"x43"x7-1/2" DEEP, DOUBLE COMPARTMENT, 18 GA, T-304 STAINLESS STEEL, HAND-BLENDED POLISHED FINISH, FULLY COATED UNDERSIDE INSULATION, UNDERMOUNT SINK W/ UNDERMOUNT CLIPS, CONTRACTOR TO PROVIDE FASTENERS, JUST MODEL #D-1943-A-GR. FAUCET: DECK MOUNTED 8" WIDESPREAD WITH SPRAY, SPOUT - 6-5/8" HIGH, 5" HEIGHT TO OUTLET, 8" PROJECTION, RIGID/SWING SPOUT, 2" SINGLE WING METAL HANDLES WITH EIGHT POINT BROACH, CHROME FINISH, TOTAL LEAD CONTENT LESS THAN 0.25% BY WEIGHTED AVERAGE, CHICAGO #102-ABCP. FOOD WASTE DISPOSER: STAINLESS STEEL GRINDER CHAMBER, GRINDER ELEMENTS AND SWIVEL LUGS, PERMANENTLY LUBRICATED UPPER AND LOWER BEARINGS, OVERLOAD PROTECTOR W/ MANUAL RESET, SINGLE DIRECTION W/ 1/3 HP, 120 VOLTS, 6.7 AMPS. IN-SINK-ERATOR BADGER 1. DRAIN: GRID STRAINER, BRASS W/ CHROME FINISH, JUST MODEL #J-35-FS. PROVIDE TAIL-PIECE, P-TRAP, SUPPLIES, ANGLE STOPS W/ LOOSE KEY.
MS-1	MOP SINK: FLOOR MOUNT, CAST IRON W/ ACID RESISTANT ENAMEL FINISH, 28"x28", 3" OUTLET, KOHLER "WHITBY" #K-6710. STAINLESS STEEL RIM GUARD. FAUCET: CHROME PLATED SERVICE SINK FAUCET, INTEGRAL VACUUM BREAKER, WALL BRACE, PAIL HOOK, 3/4" THRD OUTLET, CHICAGO #782-VB. INTEGRAL VACUUM BREAKER. PROVIDE SS HOSE RACK. PROVIDE WITH MOP HANGER AND 4' LONG 3/4"Ø FILL HOSE.
SS-1	SERVICE SINK: 24" X 20-1/4" SINGLE COMPARTMENT, CAST IRON, ACID RESISTANT ENAMEL FINISH, DRILLED BACK, KOHLER #K-6716. FAUCET: 8" CENTER, SOLID BRASS, ROUGH -PLATED FINISH, VACUUM BREAKER, PAIL HOOK FOR WASH OR MOP BUCKET, KOHLER #K-8405. ADJUSTABLE TRAP: 3" IRON PIPE CONNECTION WITH CLEANOUT PLUG AND STRAINER. KOHLER #K-6673.
DF-1	DUAL HEIGHT DRINKING FOUNTAIN: "HAWKS" I1914A, H/L/O WALL MOUNTED, 14 GA. TYPE 304 SATIN FINISH STAINLESS STEEL, ANTIMICROBIAL PROTECTION. PROVIDE SUPPLY AND STOP. INSTALL PER ADA REQUIREMENTS.
TP-1	TRAP PRIMER: DIFFERENTIAL PRESSURE AUTOMATIC TYPE, CORROSION RESISTANT BRASS, INSTALL STRICTLY PER MANUFACTURER'S RECOMMENDATIONS, PROVIDE ACCESS DOOR, PPP MODEL #PR-500
FD-1	FLOOR DRAIN: CAST IRON BODY, NICKEL BRONZE 6" ROUND TOP, NO-HUB 2" OUTLET, VANDAL PROOF SCREWS 1/2" TRAP PRIMER CONNECTION, ZURN #Z415B-P
HB-1	HOSE BOX: RECESSED BOX W/ WALL FLANGE, TYPE 304 SS W/ SATIN FINISH, CARTRIDGE-OPERATED TYPE VALVE W/ VANDAL-RESISTANT LOCKSHIELD, REMOVABLE LOOSE KEY WHEEL HANDLE & SCREW DRIVER-OPERATED STOP, 3/4" NPT FEMALE INLET, 3/4" MALE HOSE THREAD OUTLET W/ VACUUM BREAKER. ACORN #8151.

ALTERNATE BID	
MARK	DESCRIPTION
DF-1	DUAL HEIGHT DRINKING FOUNTAIN: "HAWKS" HKBFA8L-VRC, H/L/O BARRIER-FREE VANDAL-RESISTANT WALL MOUNTED, 14 GA. TYPE 304 SATIN FINISH STAINLESS STEEL, ANTIMICROBIAL PROTECTION. SELF-CONTAINED R-134A REFRIGERATION SYSTEM, 8 GPH @ 50°F, 115 VOLTS, 60Hz, 460 WATTS, 4.6 FLA. PROVIDE SUPPLY AND STOP. INSTALL PER ADA REQUIREMENTS.

# DOMESTIC WATER SIZING CALCULATION

JOB NO.: 10174  
JOB NAME: Granite Realty  
LOCATION: Modesto  
DATE: 02-June-10

## WATER SIZING WORKSHEET 2007 CPC TABLE 610.5 AND APPENDIX A

SOURCE DATA				TABLE A-2 FIXTURE TYPE				PUBLIC USE		
MIN. PRESSURE AVAILABLE:	50.0	PSI		BATHTUB/BATH-SHOWER COMB. (FILL)	0	4.0	0.0	QTY	FU	TOTAL
				BATHTUB, 3/4" BATHTUB FILL	0	10.0	0.0			
				BIDET	0		0.0			
				CLOTHESWASHER	0	4.0	0.0			
				DENTAL UNIT, CUSPIDOR	0	1.0	0.0			
				DISHWASHER, DOMESTIC	0	1.5	0.0			
				DRINKING FOUNTAIN OR WATERCOOLER	2	0.5	1.0			
				HOSE BIBB	0	2.5	0.0			
				HOSE BIBB (EACH ADDITIONAL)	0	1.0	0.0			
				LAVATORY	4	1.0	4.0			
				LAWN SPRINKLER, EACH HEAD	0	1.0	0.0			
				SINK, BAR TYPE	0	2.0	0.0			
				SINK, CLINIC FAUCET	0	3.0	0.0			
				SINK, CLINIC FLUSHOMETER W/ OR W/O FAUCET	0	8.0	0.0			
				SINK, KITCHEN DOMESTIC	1	1.5	1.5			
				SINK, LAUNDRY	0	1.5	0.0			
				SINK, SERVICE, JANITOR OR MOP BASIN	2	3.0	6.0			
				SINK, WASHUP (EACH SET OF FAUCETS)	0	2.0	0.0			
				SHOWER	0	2.0	0.0			
				URINAL, 1.0 GPF	2	4.0	8.0			
				URINAL, 2.0 GPF	0	5.0	0.0			
				URINAL, FLUSH TANK	0	2.0	0.0			
				WASHFOUNTAIN, CIRCULAR SPRAY	0	4.0	0.0			
				WATER CLOSET, 1.6 GPF GRAVITY TANK	0	2.5	0.0			
				WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	0	2.5	0.0			
				WATER CLOSET, 1.6 GPF FLUSHOMETER VALVE	6	5.0	30.0			
				WATER CLOSET > 1.6 GPF GRAVITY TANK	0	5.5	0.0			
				WATER CLOSET > 1.6 GPF FLUSHOMETER VALVE	0	8.0	0.0			
									TOTAL:	50.5
BUILDING SYSTEM										
TOTAL DEVELOPED LENGTH TO MOST REMOTE FIXTURE:	150	FT								
ELEVATION TO HIGHEST FIXTURE:	15	FT								
METER (METER SIZE = 2 1/2"):	2.5	PSI	TABLE A-1							
BACKFLOW PREVENTER:	12	PSI								
SOFTENER:	0	PSI								
FILTER:	0	PSI								
MISC:	0	PSI								
TOTAL BUILDING SYSTEM LOSS:	21.0	PSI								
FLUSH TANK SYSTEM (8 PSI RESID.):	14.0	PSI/100'								
FLUSH VALVE SYSTEM (25 PSI RESID.):	2.7									
BUILDING SUPPLY PIPE SIZE: 2 1/2" INCHES										

DOMESTIC COLD WATER (FLUSH VALVE)				
SIZE	DP/100'	GPM	F.U.	VEL (FPS)
1/2"	----	----	----	----
3/4"	----	----	----	----
1"	----	----	----	----
1 1/4"	----	----	----	----
1 1/2"	2.5	25	8	4.5
2"	2.5	50	48	5.5
2-1/2"	2.5	90	195	6.3

DOMESTIC COLD WATER (FLUSH TANK)				
SIZE	DP/100'	GPM	F.U.	VEL (FPS)
1/2"	10.0	3.5	3	4.9
3/4"	10.0	9.5	12	6.2
1"	10.0	19.5	28	7.9
1 1/4"	7.9	29.5	51	8.0
1 1/2"	6.5	41	90	8.0
2"	4.6	72	236	8.0
2-1/2"	3.5	130	533	8.0

DOMESTIC HOT WATER (5 FPS MAX)				
SIZE	DP/100'	GPM	F.U.	VEL (FPS)
1/2"	10.0	3.5	3	4.9
3/4"	6.5	7.5	8	5.0
1"	4.7	13.5	18	5.0
1 1/4"	3.6	19.0	28	5.0
1 1/2"	3.0	28	49	5.0
2"	2.2	48	119	5.0
2-1/2"	1.6	72	236	5.0



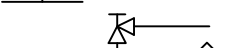

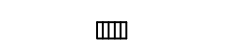

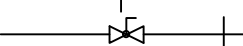
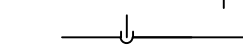
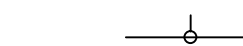
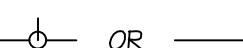
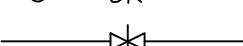


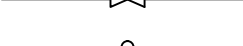
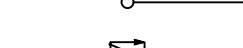
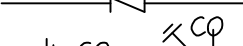


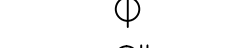
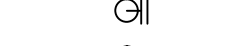
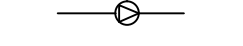

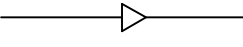
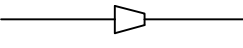
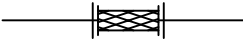

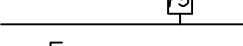
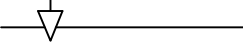
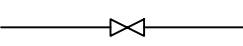
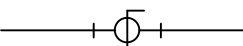
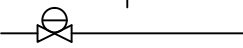
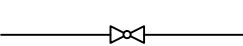
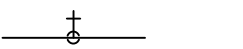
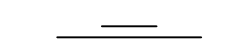

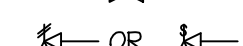
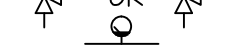



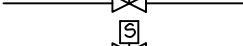
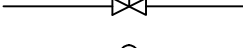
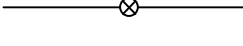
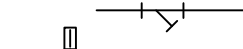
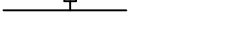
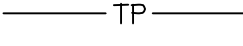
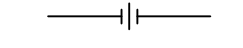

PLUMBING GENERAL NOTES	
I. CALIFORNIA CODE OF REGULATIONS: A. ALL HOT WATER RECIRCULATION LINES SHALL BE INSULATED IN ACCORDANCE WITH THE CALIFORNIA CODE OF REGULATIONS - TITLE 24, PART 6, SECTION 123. B. ALL PLUMBING FIXTURE & EQUIPMENT USED (E.G. SHOWERHEADS, LAVATORY FAUCETS, SINK FAUCETS, HOT WATER HEATERS) SHALL HAVE BEEN CERTIFIED TO THE CALIFORNIA ENERGY COMMISSION, BY ITS MANUFACTURER TO COMPLY WITH THE ENERGY EFFICIENCY STANDARDS FOR SUCH APPLIANCES.	
II. SCOPE: A COMPLETE DOMESTIC PLUMBING SYSTEM AS GENERALLY DELINEATED ON THE PLUMBING DRAWINGS, INCLUDING SERVICE PIPING AND FINAL CONNECTIONS TO EQUIPMENT FURNISHED AND INSTALLED BY OTHER TRADES AS MAY BE SHOWN ON THE ARCHITECTURAL, ELECTRICAL OR OTHER DRAWINGS OF THE CONTRACT DOCUMENTS.	
III. CODES: ALL WORK, MATERIAL, AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS ADOPTED AND AMENDED BY THE INSPECTING AUTHORITY HAVING JURISDICTION. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT THE INSTALLATION OF WORK, MATERIAL OR EQUIPMENT NOT CONFORMING TO THESE OR OTHER CODES APPLICABLE TO THIS PROJECT. A. 2007 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24 CCR) B. 2006 IBC AND 2007 CALIFORNIA AMENDMENTS (2007 CALIFORNIA BUILDING CODE - PART 2, TITLE 24, CCR) C. 2005 NEC AND 2007 CALIFORNIA AMENDMENTS (2007 CALIFORNIA ELECTRICAL CODE - PART 3, TITLE 24, CCR) D. 2006 UMC AND 2007 CALIFORNIA AMENDMENTS (2007 CALIFORNIA MECHANICAL CODE - PART 4, TITLE 24, CCR) E. 2006 URC AND 2007 CALIFORNIA AMENDMENTS (2007 CALIFORNIA PLUMBING CODE - PART 5, TITLE 24, CCR) F. 2004 IFC AND 2007 CALIFORNIA AMENDMENTS (2007 CALIFORNIA FIRE CODE - PART 9, TITLE 24, CCR)	
IV. WORKMANSHIP: ALL WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER ACCORDING TO THE BEST TRADE PRACTICE BY THOSE SKILLED IN THE PARTICULAR TRADE. EQUIPMENT FIXTURES, PIPING, ETC., SHALL BE PLUMB, LEVEL, SQUARE OR CENTERED, ETC. EQUIPMENT TO BE INSTALLED IN STRICT COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS	
V. EXISTING INFORMATION: THE CONTRACTOR SHALL OBSERVE AND RECORD CONDITION OF ALL EXISTING SURFACES, STRUCTURE(S) AND FINISHES THAT WILL RECEIVE NEW FINISHES FIXTURES AND/OR EQUIPMENT, INCLUDING AREAS THAT ADJACENT NEW WORK OR ARE IN ANY WAY AFFECTED BY THE WORK OF THIS CONTRACT. CONTRACTOR SHALL INCLUDE IN THEIR BID ANY AND ALL WORK REQUIRED TO ACCOMMODATE THE NEW CONSTRUCTION WITHIN THE MAXIMUM TOLERANCES INDICATED OR SPECIFIED IN THE CONSTRUCTION DOCUMENTS OR AS ACCEPTABLE TO THE ARCHITECT.	
VI. PERMITS AND UTILITY SERVICE FEES: PLUMBING CONTRACTOR TO ARRANGE AND PAY FOR ALL PERMITS, INSPECTIONS, AND SERVICE CHARGES REQUIRED IN THE INSTALLATION OF THE WORK.	
VII. ACCURACY: PLANS ARE DIAGRAMMATIC. CONTRACTOR SHALL CONFIRM ALL DIMENSIONS AND LOCATION OF WALLS, PARTITIONS, FIXTURES, ETC., AGAINST DESIGN PLANS FOR CONSISTENCY AND ACCURACY PRIOR TO COMMENCING WORK.	
VIII. PROVIDE AND INSTALL CONDENSATE DRAIN WITH TRAP AT EACH A/C UNIT PER U.P.C., AT LOCATIONS SHOWN ON DRAWINGS COORDINATE WITH MECHANICAL CONTRACTOR.	
IX. PROVIDE AND INSTALL ACCESS PANEL FOR ALL SHUT-OFF, ISOLATION OR BRANCH VALVES NOT READILY ACCESSIBLE. ACCESS PANELS SHALL BE PROVIDED AND INSTALLED AT ALL TRAP PRIMER VALVES AND WATER HAMMER ARRESTORS.	

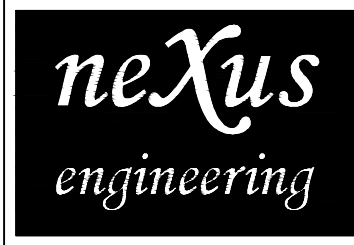
PLUMBING MATERIAL SPECIFICATIONS	
A. DWV PIPE: ABS SCH. 40 PLASTIC DRAIN, WASTE AND VENT, ASTM D2661-94A FITTINGS: ABS SCH. 40, ASTM D2661-94A ALL ABS PIPING EXPOSED TO SUNLIGHT SHALL BE PROTECTED BY WATER BASE SYNTHETIC LATEX PAINT. CPC 313.5 AND IS 5-92 313.3	
B. DOMESTIC WATER PIPE: COPPER TYPE L PER ASTM B-88 FITTINGS: WROUGHT COPPER PER ANSI 16.22 INSULATION: INSULATE HOT WATER AND HOT WATER RETURN WITH 1" FIBERGLASS INSULATION AND ALL-SERVICE-JACKET	
C. CONDENSATE DRAIN PIPE: COPPER TYPE L PER ASTM B-88 FITTINGS: WROUGHT COPPER PER ANSI 16.22	
D. NATURAL GAS (WITHIN BUILDING) PIPE: SCH 40 BLACK STEEL, THREADED PER ASTM A-53 FITTINGS: SCREWED MALLEABLE IRON PER ANSI B-16.3	

T-24 MECH. MANDATORY MEASURES	
SERVICE WATER HEATING SYSTEMS	
<input checked="" type="checkbox"/> §113(c): INSTALLATION	
1. TEMPERATURE CONTROLS FOR PUBLIC LAVATORIES. THE CONTROLS SHALL LIMIT THE OUTLET TEMPERATURE TO 110°F	
2. CIRCULATING SERVICE WATER-HEATING SYSTEMS SHALL HAVE A CONTROL CAPABLE OF AUTOMATICALLY TURNING OF THE CIRCULATING PUMP WHEN HOT WATER IS NOT REQUIRED.	

PLUMBING EQUIPMENT SCHEDULE	
MARK	DESCRIPTION
WH-1	WATER HEATER: 40 GALLON STORAGE CAPACITY, 41 GPH RECOVERY @ 90°F TEMP. RISE, 40 MBH INPUT, 5 YEAR WARRANTY. PROVIDE 3/4" TFP RELIEF VALVE, 1/2" CN INLET, 1/2" HW OUTLET, 1/2" GAS. BRADFORD WHITE #M-1-40356EN, OPERATING WEIGHT = 450 LBS.
ET-1	EXPANSION TANK: BUTYL DIAPHRAM, AIR CHARGE VALVE, STATE #ETC-5X
CP-1	CIRCULATION PUMP: BRONZE BODY, POLYPROPYLENE IMPELLER, CERAMIC SHAFT, 3/4" FLANGED CONNECTIONS, 10 GPM @ 8' W.C. 115V, 1ø, 92 WATTS @ .80 FLA, CP WT = 10 lbs. BELL & GOSSET #NBF-22

FIXTURE CONNECTION SCHEDULE									
FIXTURE	SYM	WASTE		TRAP	VENT	COLD WATER		HOT WATER	
		BRANCH	OUTLET			BRANCH	OUTLET	BRANCH	OUTLET
WATER CLOSET (F.V.)	WC	3"	3"	INT.	2"	1 1/2"	1"	--	--
URINAL	UR	2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	3/4"	--	--
LAVATORY	L	2"	1 1/2"	1 1/2"	1 1/2"	3/4"	1/2"	3/4"	1/2"
SINK	S	2"	1 1/2"	1 1/4"	1 1/2"	3/4"	1/2"	3/4"	1/2"
FLOOR DRAIN	FD	2"	2"	2"	1 1/2"	1 1/2"	--	--	--
DRINKING FOUNTAIN	DF	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1/2"	1/2"	--	--

PLUMBING LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
-----	SS	WASTE OR SANITARY SEWER BELOW FLOOR
-----	V	VENT PIPING
-----	CW	COLD WATER
----- ICW -----	ICW	INDUSTRIAL COLD WATER
-----	HWS (110", 140")	HOT WATER SUPPLY
-----	HWR	HOT WATER RETURN
----- G -----	G	NATURAL GAS - LOW PRESSURE
----- MPG -----	MPG	NATURAL GAS - MEDIUM PRESSURE (5.0 psi)
----- HPG -----	HPG	NATURAL GAS - HIGH PRESSURE (15.0psi)
----- FOS -----	FOS	FUEL OIL SUPPLY
----- FR -----	FR	FUEL OIL RETURN
----- FOS/R -----	FOS/R	COMBINATION FUEL OIL SUPPLY/RETURN
---X---X---X---X---	(E)	EXISTING TO BE REMOVED
--- D --- OR ---	D OR IW	DRAIN OR INDIRECT WASTE
----- CD -----	CD	CONDENSATE DRAIN
----- MPS -----	MPS	MEDIUM PRESSURE STEAM (85 psig)
----- CR -----	CR	CONDENSATE RETURN
----- PCR -----	PCR	PUMPED CONDENSATE RETURN
----- P T ---X---	P & TRV	PRESSURE & TEMPERATURE RELIEF VALVE PIPING
--- DI ---	DI	DEIONIZED WATER (SCH 80 CPVC)
----- CF -----	CF	CHEMICAL FEED (BOILER, SCH 80 PVC)
----- CA -----	CA	COMPRESSED AIR
----- IHW -----	IHW	INDUSTRIAL HOT WATER
----- SD, RWL -----	SD, RWL	STORM DRAIN, RAINWATER LEADER
----- OFL -----	OFL	RAINWATER OVERFLOW LEADER (STORM)
	AD , AP	ACCESS DOOR, ACCESS PANEL
	AC	AIR CHAMBER
	ANV	ANGLE VALVE
	AQ	AQUASTAT
	AD	AREA DRAIN
	AAV	AUTOMATIC AIR VENT
	BV	BALL VALVE
		BRANCH - TOP CONNECTION
		BRANCH - BOTTOM CONNECTION
		BRANCH - SIDE CONNECTION
	BFV	BUTTERFLY VALVE
	COP	CAP ON END OF PIPE
	CBV	CALIBRATED BALANCE VALVE
	CB , RD	CATCH BASIN, ROOF DRAIN
	CKV	CHECK VALVE
	CO	CLEANOUT PLUG
	FCO	FLOOR CLEANOUT
	GCO	GRADE CLEANOUT
	WCO	WALL CLEANOUT
	CP	CIRCULATING PUMP
	POC	POINT OF CONNECTION
	CR	CONCENTRIC REDUCER
	ER	ECCENTRIC REDUCER
	FC	FLEXIBLE CONNECTOR
	FD	FLOOR DRAIN
	FS	FLOW SWITCH
	GCK	GAGE COCK
	GV	GATE VALVE
	GSCK , PC	GAS COCK , PLUG COCK
	GPR	GAS PRESSURE REGULATOR
	GL. V.	GLOBE VALVE
	HB	HOSE BIBB
	PG	PIPE GUIDE
	PRV	PRESSURE REDUCING VALVE
	RV or P & TRV	RELIEF VALVE OR PRESSURE & TEMPERATURE RELIEF VALVE
	PG	PRESSURE GAUGE
	D	RISER DOWN (ELBOW)
	R	RISER UP (ELBOW)
	TV, PV	SELF OPERATED VALVE (THERMO OR VAPOR PRESSURE)
	SV	SOLENOID VALVE
		STEAM TRAP (ALL TYPES)
	STR	STRAINER
	TH	THERMOMETER
	TP	TRAP PRIMER
	UN	UNION OR FLANGE
		VALVE IN RISER (TYPE AS INDICATED OR NOTED)
	CWH, HWH, VH	COLD WATER HEADER, HOT WATER HEADER, VENT HEADER
	DIA	DIAMETER



Consulting Mechanical Engineers  
1400 Lone Palm Ave.  
Suite A  
Modesto, CA 95351  
Tel: 209.572.7399 Fax: 209.236.1579  
HVAC, Plumbing/Piping, Fire Sprinklers  
Process/Plant Engineering, Refrigeration

L Street Architects  
L i m i t e d  
1400 Lone Palm Ave.  
Modesto, California 95354  
209-572-7405 209-575-4574 fax  
www.lstreetarchitects.com

TENANT IMPROVEMENT FOR  
**GRANITE REALTY**  
CORNERSTONE MALL  
2000 BRIGSMORE  
MODESTO, CALIFORNIA

REVISIONS:	
DRAWN:	RLH
DATE:	07/13/2010
FILE:	424-ALL
JOB:	44,424
PRINT DATE:	

PLUMBING  
SCHEDULES,  
LEGEND, NOTES,  
& DETAILS