KEY TO SYMBOLS

PLUMBING LEGEND					
SYMBOL	ABBREV	DESCRIPTION			
	S OR W	SANITARY BELOW GRADE			
	S OR W	SANITARY ABOVE GRADE			
	ST	STORM BELOW GRADE			
ST	ST	STORM ABOVE GRADE			
	CW	DOMESTIC COLD WATER			
	HW	DOMESTIC HOT WATER			
	HWR	DOMESTIC HOT WATER RETURN			
	V	SANITARY VENT			
G	G	NATURAL GAS			
O/	IW	INDIRECT WASTE PIPING			
	DN	PIPE OFFSET DOWN			
 0	UP	PIPE OFFSET UP			
O _{FD}	FD	FLOOR DRAIN			
<u> </u>					

GENERAL NOTES

- 1. NOTES APPLY TO ALL PLUMBING SHEETS.
- 2. EACH CONTRACTOR IS RESPONSIBLE FOR HAVING THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS AS THEY RELATE TO THIS WORK. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED DUE TO LACK OF THIS KNOWLEDGE.
- 3. PROVIDE ALL MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY FOR INTENDED USE AND IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS.
- 4. COORDINATE SEWER AND WATER CONNECTIONS WITH EXISTING. PROVIDE PRESSURE REDUCING VALVE AND BACKFLOW PREVENTER AS SHOWN OR REQUIRED BY AHJ. VERIFY INVERT AND SLOPE OF INCOMING SANITARY SEWER BEFORE TRENCHING. 5. REFER TO RISER DIAGRAMS AND PLUMBING
- NOT SHOWN ON PLAN. 6. SANITARY AND STORM SEWER PIPING SHOWN IS BASED ON 1/4" PER FOOT FALL FOR ALL PIPE SMALLER THAN 3" DIAMETER AND 1/8" PER FOOT FALL FOR PIPE

FIXTURE SCHEDULE FOR ALL PIPING AND PIPE SIZES

7. ALL SEWER PIPING BELOW SLAB TO BE 2" DIAMETER MINIMUM.

3" DIAMETER AND LARGER.

- 8. PROVIDE ACCESS DOORS TO ALL CONCEALED VALVES AND CLEAN-OUTS; AND NOT ABOVE AN ACCESSIBLE CEILING.
- 9. PROVIDE TRAP SEAL PRIMERS AND 1/2" COPPER TUBING CONNECTION TO ALL FLOOR DRAINS AS SHOWN OR AS REQUIRED BY AHJ. CONTRACTOR SHALL VERIFY REQUIREMENTS.
- 10. INSTALL VTR'S A MINIMUM 5'-0" FROM PARAPET OR OUTSIDE WALL AND 10'-0" MINIMUM FROM EQUIPMENT WITH OUTSIDE AIR INTAKE.
- 11. INSTALL WATER PIPE ON WARM OF EXTERIOR WALL INSULATION TO PREVENT FREEZING.
- 12. WHEN DEEP FROST LOCATIONS ARE ENCOUNTERED, ROUTE SANITARY LINES UNDER BUILDING AS MUCH AS POSSIBLE.
- 13. PROVIDE PVC SLEEVE FOR ALL COLD/HOT WATER FLOOR PIPE PENETRATIONS. MAKE SLEEVE LARGE ENOUGH FOR INSULATION. SEAL WITH GRAY MASTIC
- AND ENSURE OF NO WATER PENETRATIONS. 14. PROVIDE AND INSTALL WATTS 8A VACUUM BREAKER ON ANY THREADED EXTERIOR OR INTERIOR
- 15. ALL WATER SHUT-OFF VALVES SHALL BE "BALL LOCK" TYPE. PROVIDE SHUT-OFF VALVES AT EACH TERMINATION POINT OF ASSOCIATED EQUIPMENT.
- 16. PROVIDE SEISMIC BRACING BASED ON APPROPRIATE SEISMIC ZONE REQUIREMENTS PER LOCAL AND NATIONAL CODES. CONTRACTOR'S RESPONSIBILITY INCLUDES STRUCTURAL ENGINEER'S CERTIFICATION ON DETAILS SUBMITTED FOR

VALVES

V / 11		<u>EQUIPI</u>	<u>MENT</u>
	TRIBLE BUTY VALVE	\bigcirc	PUMP
	TRIPLE DUTY VALVE 3-WAY VALVE	(2)	PUMP
	AUTOMATIC CONTROL VALVE	_M_	WATER METER
№ 1–	BALL VALVE	G	GAS METER
		ANNO	<u> TATION</u>
U	BASKET STRAINER	lacktriangle	CONNECT TO EXISTING
ф –	BUTTERFLY VALVE		LIMIT OF REMOVAL
\searrow	CHECK VALVE	LAV	FIXTURE TYPE
	FLOW CONTROL VALVE	1 1	NO. OF FIXTURE UNITS
→ >>-	GATE VALVE		
	GLOBE VALVE	L1	STORM PIPING INTERIOR LEADER DESIGNATIONS
	MOTOR OPERATED VALVE		BEGIGNATIONS
Å ⊢	OUTSIDE SCREW YOKE		

PRESSURE REDUCING VALVE

SHUTOFF BALANCING VALVE

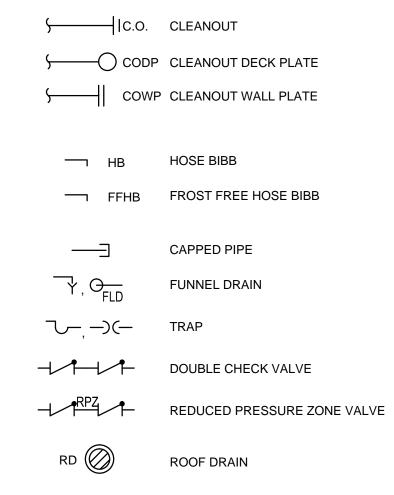
PRESSURE RELIEF VALVE

SOLENOID VALVE

GAS COCK

SHUT OFF VALVE

PIPING



OVERFLOW DRAIN

ABBREVIATIONS

AB	ABOVE	FPS	FEET PER SECOND	PD	PRESSURE DROP
AD	ACCESS DOOR			PUD	PUMPED DISCHARGE
AFF	ABOVE FINISHED FLOOR	FT	FEET		
AP	ACCESS PANEL	FLD	FUNNEL DRAIN	PRESS	PRESSURE
AUTO.	AUTOMATIC	G	GAS	PSI	POUNDS PER SQUARE INCH
BLDG	BUILDING	GA	GAUGE	R	RISE
BOP	BOTTOM OF PIPE	GC	GENERAL CONTRACTOR	(R)	RELOCATED
BTU	BRITISH THERMAL UNIT	GL	GALLON	REQD	REQUIRED
BTUH	BTU PER HOUR	GPH	GALLONS PER HOUR	RPM	REVOLUTIONS PER MINUTE
<u>C</u>	CENTERLINE	GPM	GALLONS PER MINUTE	RD	ROOF DRAIN
CLG	CEILING	Н	HEIGHT	RH	ROOF HYDRANT
CO	CLEAN OUT	НВ	HOSE BIB	RM	ROOM
CODP	CLEAN OUT DECK PLATE	HC	HUNG CEILING	RND	ROUND
	CLEAN OUT WALL PLATE	HW	HOT WATER		
COWP		HWR	HOT WATER RETURN	RPZ	REDUCED PRESSURE ZONE DEVICE
COD	CONTINUED ON DRAWING	HWH	HOT WATER HEATER	S	SOUTH
CU FT	CUBIC FEET	HR	HOUR	SK	SINK
CU IN	CUBIC INCHES	HZ	FREQUENCY	SS	SERVICE, SLOP SINK
CW	COLD (DOMESTIC) WATER	IN	INCH OR INCHES	SF, SQ FT, Ф	SQUARE FEET
D (D)	DROP	IPS	IRON PIPE SIZE	S.O.	SHUT-OFF
(D)	DEMOLITION	IW	INDIRECT WASTE	SP	STATIC PRESSURE
DF DIA, Ø	DRINKING FOUNTAIN DIAMETER	INVERT	INVERT ELEVATION	SPEC	SPECIFICATION
DN.	DOWN	KW	KILOWATT	STST	STAINLESS STEEL
DWG	DRAWING	LAV	LAVATORY	SD	STORM DRAIN
DP		LAVH	LAVATORY HANDICAPPED	ST	SEPTIC TANK
E	DISTRIBUTION POOL EAST	L	LENGTH	STP	INDIRECT WASTE STANDPIPE
		LBS	POUNDS	Т	THROAT
EA.	EACH CONTRACTOR	LIN FT	LINEAR FEET	TAL	TOTAL ACTIVE LENGTH
EC	ELECTRICAL CONTRACTOR	LP	LEACHING POOL	TBR	TO BE REMOVED
EL	ELEVATION	M	METER	TEMP	TEMPERATURE
ELEC	ELECTRIC	MAX	MAXIMUM	TOS	TOP OF STEEL
EMSH	EMERGENCY SHOWER	MBH	THOUSAND BTU PER HOUR	TYP	TYPICAL
EQ EWC	EQUAL ELECTRIC WATER COOLER	MC	MECHANICAL CONTRACTOR	UON	UNLESS OTHERWISE NOTED
EWT	ENTERING WATER COOLER ENTERING WATER TEMPERATURE	MR	MEN'S ROOM	URN	URINAL
(E)	EXISTING WATER TEMILERATORE	MIN	MINIMUM	V	VENT
EXP	EXPANSION TANK	MOT	MOTOR	VTR	VENT THROUGH ROOF
°F	DEGREES FAHRENHEIT	N	NORTH	W	WASTE
F&T	FLOAT AND THERMOSTATIC	(N)	NEW	W/	WITH
FA	FREE AREA (SQ. FT.)	NFPA	NATIONAL FIRE PROTECTION ASSOC.	W/O	WITHOUT
FAI	FRESH AIR INTAKE	NC	NORMALLY CLOSED	WCV	WATER CLOSET FLUSH VALVE TYPE
FC	FLEXIBLE CONNECTION	NIC	NOT IN CONTRACT	WCVH	WATER CLOSET FLUSH VALVE TYPE
FD	FLOOR DRAIN	NO	NORMALLY OPEN		HANDICAPPED
		#	NUMBER	WCT	WATER CLOSET FLUSH TANK TYPE
FFHB	FROST FREE HOSE BIB	NPT	NATIONAL PIPE THREAD	WCTH	WATER CLOSET FLUSH TANK TYPE
FIN FL	FINISHED FLOOR	NTS	NOT TO SCALE		HANDICAPPED
FLA	FULL LOAD AMPERES	O.A.I.	OUTSIDE AIR INTAKE	WC	WATER COLUMN
FLR	FLOOR	OD	OVERFLOW DRAIN	WG	WATER GAUGE
FPM	FEET PER MINUTE	OV	OUTLET VELOCITY	WMS	WIRE MESH SCREEN
				WR	WOMEN'S ROOM

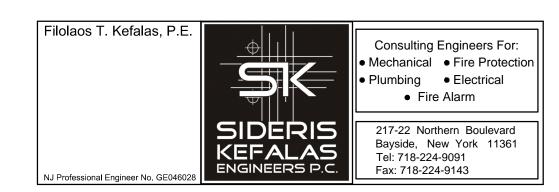
DRAWING NO.

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TITLE

PLUMBING DETAILS

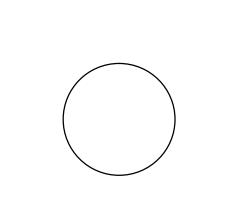
P-000	PLUMBING SYMBOLS, ABBREVIATIONS AND DRAWING
P-100	PLUMBING 1ST FLOOR PLAN
P-101	PLUMBING 2ND FLOOR PLAN
P-102	PLUMBING ROOF PLAN
P-200	PLUMBING RISER DIAGRAMS
P-201	PLUMBING RISER DIAGRAMS AND SCHEDULES
P-300	PLUMBING DETAILS
P-301	PLUMBING DETAILS



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CERTIFICATE OF AUTHORIZATION AC-438

STUDENT SERVICES & CLASSROOM ADDITION UNION COUNTY COLLEGE

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SHEET CONTENTS:

PLUMBING SYMBOLS, ABBREVIATIONS AND DRAWING LIST

SUBMI	SSIONS			REVISION	ONS			DATE	FEB. 18, 2014	
DATE	DESCRIPTION	BY	CHKD	DATE	DESCRIPTION	BY	CHKD	SCALE	AS SHOWN	
04/04/14	ISSUE FOR BID							DRWN BY	PEF	
								CHKD BY	FTK/CMS	
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