

ABBREVIATIONS		
SYMBOL	ABBR	DEFINITION
		REMOVE EXISTING TO THIS POINT
		CONNECT NEW TO EXISTING AT THIS POINT
	AFF	ABOVE FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	AHU	AIR HANDLING UNIT
	AP	ACCESS PANEL
	APD	AIR PRESSURE DROP
	ATC	AUTOMATIC TEMPERATURE CONTROL
	BTUH	BRITISH THERMAL UNITS PER HOUR
	CFH	CUBIC FEET PER HOUR
	CFM	CUBIC FEET PER MINUTE
	CUH	CABINET UNIT HEATER
	DB	DRY BULB
	DIA	DIAMETER
	DN	DOWN
	DWG	DRAWING
	EAT	ENTERING AIR TEMPERATURE
	EF	EHAUST FAN
	ESP	ETERNAL STATIC PRESSURE
	EWI	ENTERING WATER TEMPERATURE
	E	EXISTING
	EH	EHAUST
	FCU	FAN COIL UNIT
	FD	FIRE DEPARTMENT
	GPH	GALLONS PER HOUR
	GPM	GALLONS PER MINUTE
	HB	HOSE BIBB
	HP	HORSEPOWER
	IN	INCHES
	INV ELEV	INVERT ELEVATION
	KW	KILOWATTS
	LAT	LEAVING AIR TEMPERATURE
	LWT	LEAVING WATER TEMPERATURE
	MA	MAIMUM
	MBH	ONE THOUSAND BTU
	MFG	MANUFACTURER
	MIN	MINIMUM
	NA	NOT APPLICABLE
	NFWH	NON-FREEE WALL HYDRANT
	NO	NUMBER
	OA	OUTSIDE AIR
	OED	OPEN END DUCT
	OSD	OPEN SITE DRAIN
	RCP	REFLECTED CEILING PLAN
	RM	ROOM
	RPM	REVOLUTIONS PER MINUTE
	RTU	ROOF TOP UNIT
	TYP	TYPICAL
	V / P / H	VOLTS / PHASE / HERT
	VIF	VERIFY IN FIELD
	VTR	VENT THRU ROOF
	WC	WATER COLUMN
	WG	INCHES WATER GAUGE
	WHA	WATER HAMMER ARRESTOR
	W	WITH
	WB	WET BULB
	WPD	WATER PRESSURE DROP
NOTE ALL SYMBOLS AND ABBREVIATIONS MAY NOT BE USED.		

KITCHEN EQUIPMENT SCHEDULE																	
ITEM	QTY.	DESCRIPTION	MANUFACTURER	MODEL	PLUMBING								REMARKS				
					HGT.	DRAIN	I.W.	D.W.	HGT.	C.W.	H.W.	HGT.		GAS	MBTU	HGT.	PSIG.
103	1	FROZEN BEVERAGE DISPENSER (CEE)	FBO	563	54"						3/8"						GOODE REFRIGERATION, LEFT HINGE
104B	1	TOUCHPOINT BEVERAGE DISPENSER	LANCER	TOUCHPOINT	54"	FS	1/2"										GOODE REFRIGERATION
105	1	ICE MAKER	CORNELIUS	WCC-1401R	64"	FS	3/8"				1/4"						CW SUPPLY FROM WATER FILTER CONNECTION "B" ITEM 616 - GOODE REFRIGERATION INSTALLS
201	2	COFFEE BREWER	CURTIS	GEMTIF10A1000	54"						3/8"						CW SUPPLY FROM WATER FILTER CONNECTION "B" ITEM 616 - GOODE REFRIGERATION INSTALLS
203	1	LATTE (CAPUCCINO)	BUNN	HMX-5-HW-BLK	42"						3/8"						INCLUDES HOT WATER DISPENSER
204	1	HAND SINK	ADVANCE TABCO	DI-1-105P		FS	1-1/2"				1/2"	1/2"					DROP-IN W/ REAR & SIDE SPLASH GUARD (10" DEEP) W/ K-52 FAUCET, INSTALL BY GC.
302	1	DROP-IN COLD PAN	HATCO	CWB-1	24"	FS	1"										19"x27"x25.5"
502	1	HAND SINK	ADVANCE TABCO	SHK-302		FS	1-1/2"				1/2"	1/2"					
506	1	GAS GRIDDLE 6'-0"	VULCAN	MS460									3/4"	135.0	6"		
508	1	GAS FRYER - (BATTERY)	PITCO	SG14S-2FD	24"								1"	220.0	6"		FILTER/ CONTROLS
601	1	3 COMPARTMENT SINK (115")	ADVANCE TABCO	93-23-60-24RL		FS	(3) 1-1/2"				(2) 1/2"	(2) 1/2"					
602	1	FOOD PREP SINK (45")	TURBO AIR	TSA-1-14-L2		FS	1-1/2"				1/2"	1/2"					
603	2	HAND SINK, WALL MOUNTED	ADVANCE TABCO	7-PS-66W		DIR		1-1/2"	20"	1/2	1/2						MOUNT 6" BELOW FINISHED CEILING
616	1	WATER FILTER	EVERPURE	EV943710							3/4"						120 DEG. MIN. INCOMING WATER TEMP.
622	1	DISHWASHER, UNDERCOUNTER	AMERICAN DISH	ET-AF-M	24"	FS	1-1/2"				1/2"						120 DEG. MAX. INCOMING WATER TEMP.
624	1	PRESSURE WASHING SYSTEM	SPRAY MASTER	300-5025							3/4"	18"					

PLUMBING LEGEND		
SYMBOL	ABBR.	DEFINITION
		RELIEF VALVE
		BALL VALVE
		GATE VALVE
		GAS COCK
		UNION
		CHECK VALVE
	WHA	WATER HAMMER ARRESTOR
		DRAIN VALVE
	G	NATURAL GAS PIPING
	CD	CONDENSATE DRAIN PIPING
		CAPPED PIPE
		PIPE BREAK
		PIPE UP
		DROP IN PIPE
	CW	COLD WATER
	HW	HOT WATER
	HWC	HOT WATER CIRCULATING
	V	VENT PIPING
	SAN	SANITARY PIPING
	FW	FILTERED WATER
	GW	GREASE WASTE
	HB	HOSE BIBB
	NFWH	NON-FREEE WALL HYDRANT
	FCO / YCO	FLOOR / YARD CLEAN OUT
	WCO	WALL CLEAN OUT
	FDR	FLOOR DRAIN WITH TRAP PRIMER
	FS	FLOOR SINK WITH TRAP PRIMER

PLUMBING FIXTURE SCHEDULE									
MARK	FIXTURE	ROUGH-IN CONNECTION				FIXTURE UNITS			REMARKS
		CW	HW	SAN	VENT	CW	HW	SAN	
604	MOP BASIN	1/2"	1/2"	"	1 1/2"	2.25	2.25	5	4
805	LAVATORY	1/2"	1/2"	1-1/2"	1-1/2"	1.5	1.5	2	.5
806	WATER CLOSET	1"	-	4"	2"	10	-	4	1
806A	WATER CLOSET	1"	-	4"	2"	10	-	4	1,6
807	URINAL	1/4"	-	2"	1-1/2"	5	-	4	2

NOTES:
1. FLOOR MOUNTED, BOTTOM OUTLET. VITREOUS CHINA, FLUSHOMETER VALVE
2. WALL MOUNTED, VITREOUS CHINA FITURE, WITH EPOSED MANUAL FLUSH VALVE.
3. UNDERCOUNTER, VITREOUS CHINA LAVATORY WITH MANUAL FAUCET.
4. FLOOR MOUNTED, MOLDED STONE BASIN.
5. PROVIDE WITH PLASTIC PIPE WRAP TO COVER SUPPLIES, TRAP, AND DRAIN PIPING
6. MOUNTED AT ADA ACCESSIBLE HEIGHT.

NATURAL GAS FIRED WATER HEATER SCHEDULE (#619)								
MARK	DESCRIPTION	LOCATION	GAS INLET SIZE	INLET/ OUTLET WATER	RECOVERY RATE @ 100°F RISE	GAS BTU INPUT	BASIS OF DESIGN	REMARKS
WH-1	INSTANTANEOUS GAS FIRED WATER HEATER	KITCHEN	1/4"	1/4"	.9 GPM	199,000	RINNAI RC98 KA27FFUD	1,2
WH-2	INSTANTANEOUS GAS FIRED WATER HEATER	KITCHEN	1/4"	1/4"	.9 GPM	199,000	RINNAI RC98 KA27FFUD	1,2

NOTES:
1. REFER TO ELECTRICAL PLANS FOR POWER REQUIREMENTS.
2. CONTRACTOR TO INSTALL AND PROVIDE WATER HEATERS, CONCENTRIC VENTS AND REQUIRED ACCESSORIES PER MANUFACTURERS RECOMMENDATIONS.

HOT WATER RECIRCULATING PUMP SCHEDULE								
MARK	LOCATION	GPM	FEET OF HEAD	HP	ELECTRICAL	BASIS OF DESIGN	REMARKS	
HWRP-1	ELECTRICAL ROOM	5	20	1/16	120V/1Ø/60 HZ	BELL GOSSETT PL 45	1	
HWRP-2	ELECTRICAL ROOM	4	10	55 WATTS	120V/1Ø/60 HZ	YLEM MODEL NBF-12FLW	1	

NOTES:
1. PROVIDE AQUASTAT TACO MODEL 56-2 OR APPROVED EQUAL.

FIRE PROTECTION NOTES
1. PROVIDE HYDRAULICALLY DESIGNED SPRINKLER SYSTEMS IN ACCORDANCE WITH NFPA 1.
2. SPRINKLER HEAD TEMPERATURE RATINGS SHALL BE ORDINARY (165°F) UNLESS NOTED OTHERWISE.
3. FIRE PROTECTION PIPE HANGERS SHALL BE INSTALLED AT EVERY JOINT OR AT A MAIMUM SPACING OF 10 FEET.
4. BRANCH PIPING TO SPRINKLER HEADS SHALL BE 1" UNLESS INDICATED OTHERWISE.
5. AREAS SHALL BE DESIGNED TO NFPA 1 ORDINARY HAARD GROUP 1 UNLESS NOTED OTHERWISE.
6. SPRINKLER HEADS SHALL BE CENTERED IN CEILING TILES WITHIN TWO INCHES OF CENTERLINE OF TILES.
7. COORDINATE FINAL LOCATIONS OF SPRINKLER HEADS WITH ARCHITECTURAL REFLECTED CEILING PLANS AND OBSTRUCTIONS TO SPRAY PATTERNS. SPACING OF SPRINKLERS SHALL BE IN ACCORDANCE WITH NFPA 1.
8. PROVIDE INSTITUTIONAL QUICK RESPONSE SPRINKLER HEADS IN ALL AREAS UNLESS NOTED OTHERWISE.
9. FIRE PROTECTION/SPRINKLER CONTRACTOR SHALL PREPARE AND SUBMIT NECESSARY DRAWINGS AND DOCUMENTS FOR THE PROVISION AND INSTALLATION OF THE FIRE PROTECTION SYSTEMS. THE FIRE PROTECTION SYSTEMS SHALL BE IN ACCORDANCE WITH AND SUBJECT TO NFPA AND THE STATE FIRE MARSHAL CODES, REGULATIONS, AND APPROVALS. INSTALLATION AND DESIGN DRAWINGS SHALL BE STAMPED AND SIGNED BY A REGISTERED FIRE PROTECTION ENGINEER.

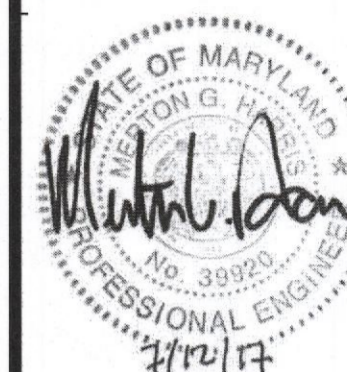
FIRE PROTECTION DESIGN CRITERIA		
1. ORDINARY HAARD GROUP 1	DENSITY	0.15 GPM/SF OVER 1,500 SF
DENSITY	MAIMUM SPRINKLER SPACING	10 SF

- GENERAL NOTES**
- A. ALL WORK SHALL COMPLY WITH ALL LOCAL AND STATE CODE AND AUTHORITIES HAVING JURISDICTION.
 - B. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS AND ARRANGE ALL REQUIRED INSPECTIONS.
 - C. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS AND TRADES.
 - D. THESE DRAWINGS, AS PREPARED, ARE DIAGRAMMATIC BUT SHALL BE FOLLOWED AS CLOSELY AS CONSTRUCTION OF THE PROJECT AND THE WORK OF THE TRADES WILL PERMIT. EQUIPMENT LOCATIONS INDICATED ARE APPROXIMATE. COORDINATE EXACT LOCATIONS AND REQUIRED CLEARANCES WITH EQUIPMENT SUPPLIER AND ALL TRADES PRIOR TO INSTALLATION.
 - E. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE EQUIPMENT INDICATED WITHIN THESE DRAWINGS UNLESS OTHERWISE NOTED. VERIFY LOCATION AND DIMENSIONS IN THE FIELD PRIOR TO FABRICATION AND/OR INSTALLATION.
 - F. ALL ROOF PENETRATIONS SHALL BE AT THE CONTRACTOR'S EXPENSE. COORDINATE WITH OWNER'S ROOFING CONTRACTOR SO AS NOT TO VOID ANY EXISTING ROOF WARRANTIES.
 - G. THE ENTIRE INSTALLATION SHALL BE GUARANTEED FREE OF DEFECTS AND CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE MATERIALS OR EQUIPMENT AT NO COST TO THE OWNER FOR A MINIMUM PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY ARCHITECT OR ENGINEER.
 - H. ALL WORK SHALL BE SUBJECT TO THE ACCEPTANCE AND APPROVAL OF THE ARCHITECT AND THE OWNER. THE ARCHITECT SHALL BE NOTIFIED OF ANY AND ALL DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENT BEFORE PROCEEDING WITH THAT PORTION OF THE WORK. FAILURE OF PROPER NOTIFICATION DOES NOT RELIEVE THE CONTRACTOR. THE CONTRACTOR SHALL CORRECT ANY AND ALL WORK ARISING FROM SUCH FAILURE TO COORDINATE DISCREPANCIES TO THE SATISFACTION OF THE ARCHITECT WITHOUT ADDITIONAL COST TO THE OWNER.
 - I. ALL KITCHEN, PREP AREA AND SALES AREA EQUIPMENT WILL BE FURNISHED AND INSTALLED. EQUIPMENT WILL BE FURNISHED WITH TRIM, FAUCETS, ESCUTCHEONS, ETC. PLUMBING CONTRACTOR SHALL PROVIDE ALL ROUGH-IN TRAPS AND MAKE FINAL CONNECTIONS (SEE EQUIPMENT SCHEDULE).
 - J. ALL PIPING TO BE CONCEALED IN HUNG CEILINGS, CHASES AND FURRED SPACES.
 - K. REFER TO EQUIPMENT SCHEDULE AND EQUIPMENT SPECIFICATIONS FOR EXACT LOCATIONS OF PLUMBING CONNECTIONS.
 - L. THE CONTRACTOR SHALL VERIFY DEPTH, SIZE, LOCATION OF ALL EXISTING UTILITIES IN FIELD PRIOR TO STARTING WORK.
 - M. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL PIPE HANGERS, AND SUPPORTS IN ACCORDANCE WITH THE LOCAL APPLICABLE CODES.
 - N. THE CONTRACTOR TO PROVIDE TRAP PRIMERS, DEEP SEAL TRAP OR TRAP SEAL ON ALL FLOOR DRAINS AS PER APPLICABLE CODE.
 - O. ALL PENETRATIONS REQUIRED FOR PLUMBING EQUIPMENT AND PIPING THROUGH ANY WALL SHALL BE PROPERLY SEALED OFF TO MAINTAIN THE INTEGRITY OF THE STRUCTURE.
 - P. ALL SHUT OFF AND ISOLATION VALVES SHALL BE BALL TYPE. ALL VALVES SERVING TOILETS AND SINKS SHALL BE ANGLE STOP TYPE.
 - Q. PROVIDE AN INDIVIDUAL BALL VALVE AND CHECK VALVE TO EACH INDIVIDUAL PIECE OF EQUIPMENT.
 - R. PROVIDE BACKFLOW PREVENTERS AT ALL COFFEE MAKERS, BAGEL OVENS, DIPPING WELLS, ICE MAKER AND ALL OTHER EQUIPMENT AS REQUIRED BY CODE.
 - S. PROVIDE AERATORS ON ALL HAND SINKS AND LAVATORIES THROUGHOUT THE FACILITY.
 - T. PROVIDE FIRESTOP SYSTEMS AT PENETRATIONS OF FIRE RATED ASSEMBLIES. REFER TO ARCHITECTURAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.

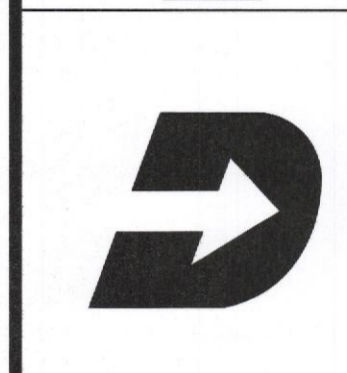


12M
811 Cromwell Park Drive, Suite 113
Crownell Business Park at BWI
Clenburnie, Maryland 21061
12Mdot2M.com
Phone 410.863.1302
Fax 410.863.1308

BR
ENGINEERING SERVICES
502 McDr
S1M
G Br. MD 21081
P 410.761.9600
F 410.761.9600
www.br



1111 dr
rd rd. d l
d of gr d
1/2 M d
LN
8 D
9920
17 JAN 2019



REV. #	ISSUE / DESCRIPTION	DATE
1	OWNER COMMENTS	05/01/17
2	OWNER COMMENTS	07/01/17

SHEET TITLE:
DATA SHEET - PLUMBING

DRAWING DATE:
01 APRIL 2017

DRAWN BY:
MVM

CHECKED BY:
MGH

PROJECT #
2889

SHEET #
P-001

FILE NAME:
2889 - P-001.dwg