

SYMBOL & ABBREVIATIONS

SYMBOL	ABBREVIATION	DESCRIPTION
-	AFF	ABOVE FINISHED FLOOR
-	AHC	ABOVE HUNG CEILING
-	BFP	BACK FLOW PREVENTOR
-	VTR	VENT THROUGH ROOF
-	FAI	FRESH AIR INTAKE
-	FS	FLOOR SINK
-	RPZ	REDUCED PRESSURE ZONE - BFP
-	DCV	DOUBLE CHECK VALVE - BFP
-	TYP	TYPICAL
-	H.W. HTR	HOT WATER HEATER
	-	3-WAY VALVE
	-	BUTTERFLY VALVE
	-	2-WAY VALVE
	-	PLUG VALVE
	-	SOLENOID VALVE
	-	GATE VALVE
	-	GLOBE VALVE
	-	CHECK VALVE
	-	OS&Y GATE VALVE
	-	BALL VALVE
	-	CIRCUIT SETTER
	-	MANUAL AIR VENT
	-	T&P RELIEF VALVE
	-	PRESSURE REDUCING VALVE
	-	TEE DOWN
	-	ELBOW DOWN
	-	TEE UP
	-	ELBOW UP
	-	PIPE CAP
	CODP	CLEAN OUT DECK PLATE
	WCO	WALL CLEAN OUT
	FCO	FLOOR CLEAN OUT
	-	CONCENTRIC REDUCER
	-	ECCENTRIC REDUCER
	-	STRAINER
	-	FLEXIBLE CONNECTION
	-	FLOW ARROW
	-	PRESSURE GAGE
	-	PUMP
	-	THERMOMETER
	-	UNION
	EX.	EXISTING TO REMAIN
	REL.	REMOVE AND RELOCATE
	NEW	NEW WORK
	DEM.	EXISTING TO BE REMOVED
	CW	COLD WATER
	HW	HOT WATER
	HWC	HOT WATER RECIRCULATION
	V	VENT
	W	WASTE LINE
	S	SANITARY
	LDR	LEADER
	SD	STORM DRAINAGE
	PD	PUMP DISCHARGE

GENERAL NOTES

- THE CONTRACT DRAWINGS INDICATE THE EXTENT AND GENERAL ARRANGEMENTS OF THE PLUMBING SYSTEMS. IF ANY DEPARTURES FROM THE DRAWINGS ARE DEEMED NECESSARY BY THE PLUMBING CONTRACTOR, DETAILS OF SUCH DEPARTURES AND THE REASONS THEREFORE SHALL BE SUBMITTED TO THE OWNER AND ENGINEER FOR APPROVAL. NO SUCH DEPARTURES SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE OWNER AND ENGINEER. EQUIPMENT AND PIPING ARRANGEMENTS SHALL PROVIDE ADEQUATE AND ACCEPTABLE CLEARANCES FOR ENTRY, SERVICING, AND MAINTENANCE. ANY CHANGES TO PIPING AND EQUIPMENT LOCATIONS NECESSARY TO AVOID INTERFERENCE WITH OTHER TRADES SHALL BE MADE AT NO EXTRA COST.
- THE PLUMBING WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE PREVAILING NEW YORK STATE PLUMBING AND BUILDING CODES. IN CASE OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND A GOVERNING CODE OR ORDINANCE, THE MORE STRINGENT STANDARD SHALL APPLY.
- THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR PAYING RELATED FEES.
- CONNECTIONS TO EXISTING UTILITIES AND SERVICES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, INVERT ELEVATIONS, AND SIZES OF EXISTING PLUMBING SERVICES IN FIELD, AND SHALL CONNECT NEW PLUMBING SERVICES AS INDICATED ON DRAWINGS.
- PRIOR TO FABRICATION, THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB SITE, AND COORDINATE THIS WORK WITH THE WORK OF ALL OTHER TRADES.
- ALL ACCESS PANELS SHALL BE BY GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR LOCATION.
- PROVIDE ALL PLUMBING FIXTURES, PIPING, VALVES AND ACCESSORY ITEMS AS SPECIFIED AND AS REQUIRED FOR A COMPLETE INSTALLATION. ROUGHING DIMENSIONS OF FIXTURES MUST BE COORDINATED WITH THE GENERAL CONTRACTOR.
- PITCH ALL WASTE, SANITARY, AND STORM DRAIN PIPING AT MAXIMUM SLOPE POSSIBLE, BUT NOT LESS THAN 1/8" PER FOOT FOR PIPING ≥ 3" AND 1/4" PER FOOT FOR PIPING ≤ 2 1/2".
- NO PIPING SHALL RUN EXPOSED IN FINISHED AREAS.
- PROVIDE DIELECTRIC FITTINGS OR COUPLINGS WHEREVER DISSIMILAR METALS ARE JOINED.
- PROVIDE SHUTOFF VALVES AT ALL FIXTURES AND EQUIPMENT ON COLD WATER, AND HOT WATER PIPES.
- ALL WORK SHALL BE PROPERLY TESTED, BALANCED, AND CLEANED AND DISINFECTED. PROVIDE A ONE YEAR WARRANTY FROM DATE OF FINAL INSPECTION ON ALL PARTS AND LABOR.
- PROVIDE ALL PIPE OPENINGS THROUGH PARTITIONS WITH PIPE SLEEVES. FOR PIPES PENETRATING FIRE RATED PARTITIONS, THE SPACE BETWEEN THE PIPE AND THE SLEEVE SHALL BE SEALED WITH FIRE STOPPING MATERIAL. PENETRATIONS FOR PIPING SHALL BE MADE BY CORE DRILLING WHENEVER POSSIBLE.
- PROVIDE TRAP SEAL PRIMERS FOR FLOOR DRAINS WHERE INDICATED ON PLAN. INSTALL THE PRIMER VALVE IN THE COLD WATER SERVICE, WITH THE TRAP CONNECTION PIPED TO THE FLOOR DRAIN TRAP. LOCATE THE VALVE IN AN ACCESSIBLE LOCATION.
- NEW PIPING LAYOUT IS PREDICATED ON RECORD DRAWING DATA OF EXISTING RISERS AND DRAWINGS. MODIFICATIONS TO THE LAYOUT MAY BE REQUIRED DUE TO DIFFERENT ACTUAL CONDITIONS, OBSTRUCTIONS, INTERFERENCES, ETC.
- SEE THE ARCHITECTURAL DRAWINGS FOR EXACT PHASING AND TIME SCHEDULE FOR CONSTRUCTION.
- ALL MOTOR STARTERS AND DISCONNECT SWITCHES FOR PLUMBING EQUIPMENT SHALL BE FURNISHED BY THE PLUMBING CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED. DISCONNECT SWITCHES FURNISHED BY THE PLUMBING CONTRACTOR FOR PLUMBING EQUIPMENT SHALL BE HEAVY DUTY TYPE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY VENTILATION AND EXHAUST AIR WHEN WELDING OR SOLDERING OPERATIONS ARE PERFORMED, AS REQUIRED BY OSHA.

EQUIPMENT NOTES

- DOMESTIC HOT WATER HEATER, HWH-1 SHALL BE ELECTRIC AO-SMITH XI - MODEL DRE-52-6; PROVIDING 25 GPH RECOVERY AT 40°-140°, 6kW INPUT, 50 GALLONS NOMINAL STORAGE CAPACITY, 55" HIGH, 27" DIAMETER, 260 POUNDS SHIPPING WEIGHT. PROVIDE CONDENSATE NEUTRALIZATION SYSTEM & P-TRAP. FURNISH DISCONNECT SWITCH FOR EACH HOT WATER HEATER TO BE INSTALLED BY THE ELECTRICAL CONTRACTOR.
- DOMESTIC HOT WATER RE-CIRCULATION PUMP, HWC-1, TO BE BASED ON BELL & GOSSETT MODEL NBF-18S, 100% LEAD FREE, 90 WATTS, 115V-1 PHASE-60 HERTZ, 0.74 FULL LOAD AMPS, 3000 RPM AND 5 GPM @ 10 FEET HEAD. FURNISH DISCONNECT SWITCH TO BE INSTALLED BY THE ELECTRICAL CONTRACTOR.

EQUIPMENT NOTES CONTINUED

- GASOLINE TANK - MAINTENANCE BUILDING: SHALL BE ENVIRO-SAFE FIREGUARD 500 GALLON DOUBLE-WALL ABOVEGROUND FUEL TANK WITH INTEGRAL FUEL DISPENSING SYSTEM. PROVIDE STEEL SUPPORT SADDLES, LIFTING LUGS, 6" EMERGENCY VENT, 2" STACK VENT, 818 CLOCK GAUGE WITH FLOAT, 7.5 GALLON OVERSPILL WITH LOCKABLE CAP, SPIN ON FILTER AND HOUSING ASSEMBLY, INTERSTITIAL LEAK GAUGE, STEP LADDER AND PLATFORM, 16" MAN-WAY, BRACKET, PIPING BALL VALVE AND ANTI-SIPHON VALVE, SUCTION LINE FOOT-VALVE 6" FROM BOTTOM TANK, FILL-RITE 711VA PUMP 1" ASSEMBLY METER AND FILTER, 1" AUTOMATIC SHUT-OFF NOZZLE, SWIVEL, & BREAKAWAY 18' X 1" HOSE. TANK SHALL BE PROVIDED WITH EPOXY PRIMER & ACRYLIC POLYURETHANE COATING, UL2085 LABELED AND LISTED, NFPA-30-30A TESTED, 2-HOUR FIRE TESTED, IMPACT AND BALLISTIC TESTED. 60" DIAMETER X 100" LONG; DRY WEIGHT: 3,100 LBS. PROVIDE PNEUMERCATOR LS-600 LEVEL SWITCHES & MP 450S LEVEL GAUGE PROBES. PROVIDE COMPLETE FIRE SUPPRESSION SYSTEM FOR COVERAGE OF THE TANK AND DISPENSING SYSTEM. COORDINATE WITH ARCHITECTURAL STRUCTURE ABOVE TANK.
- GASOLINE TANK - CART STORAGE: SHALL BE ENVIRO-SAFE FIREGUARD 500 GALLON DOUBLE-WALL ABOVEGROUND FUEL TANK WITH INTEGRAL FUEL DISPENSING SYSTEM. PROVIDE STEEL SUPPORT SADDLES, LIFTING LUGS, 6" EMERGENCY VENT, 2" STACK VENT, 818 CLOCK GAUGE WITH FLOAT, 7.5 GALLON OVERSPILL WITH LOCKABLE CAP, SPIN ON FILTER AND HOUSING ASSEMBLY, INTERSTITIAL LEAK GAUGE, STEP LADDER AND PLATFORM, 16" MAN-WAY, BRACKET, PIPING BALL VALVE AND ANTI-SIPHON VALVE, SUCTION LINE FOOT-VALVE 6" FROM BOTTOM TANK, FILL-RITE 711VA PUMP 1" ASSEMBLY METER AND FILTER, 1" AUTOMATIC SHUT-OFF NOZZLE, SWIVEL, & BREAKAWAY 18' X 1" HOSE. TANK SHALL BE PROVIDED WITH EPOXY PRIMER & ACRYLIC POLYURETHANE COATING, UL2085 LABELED AND LISTED, NFPA-30-30A TESTED, 2-HOUR FIRE TESTED, IMPACT AND BALLISTIC TESTED. 60" DIAMETER X 100" LONG; DRY WEIGHT: 3,100 LBS. PROVIDE PNEUMERCATOR LS-600 LEVEL SWITCHES & MP 450S LEVEL GAUGE PROBES. PROVIDE COMPLETE FIRE SUPPRESSION SYSTEM FOR COVERAGE OF THE TANK AND DISPENSING SYSTEM. COORDINATE WITH ARCHITECTURAL STRUCTURE ABOVE TANK.
- DIESEL TANK: SHALL BE ENVIRO-SAFE FIREGUARD 500 GALLON DOUBLE-WALL ABOVEGROUND FUEL TANK WITH INTEGRAL FUEL DISPENSING SYSTEM. PROVIDE STEEL SUPPORT SADDLES, LIFTING LUGS, 6" EMERGENCY VENT, 2" STACK VENT, 818 CLOCK GAUGE WITH FLOAT, 7.5 GALLON OVERSPILL WITH LOCKABLE CAP, SPIN ON FILTER AND HOUSING ASSEMBLY, INTERSTITIAL LEAK GAUGE, STEP LADDER AND PLATFORM, 16" MAN-WAY, BRACKET, PIPING BALL VALVE AND ANTI-SIPHON VALVE, SUCTION LINE FOOT-VALVE 6" FROM BOTTOM TANK, FILL-RITE 711VA PUMP 1" ASSEMBLY METER AND FILTER, 1" AUTOMATIC SHUT-OFF NOZZLE, SWIVEL, & BREAKAWAY 18' X 1" HOSE. TANK SHALL BE PROVIDED WITH EPOXY PRIMER & ACRYLIC POLYURETHANE COATING, UL2085 LABELED AND LISTED, NFPA-30-30A TESTED, 2-HOUR FIRE TESTED, IMPACT AND BALLISTIC TESTED. 60" DIAMETER X 100" LONG; DRY WEIGHT: 3,100 LBS. PROVIDE PNEUMERCATOR LS-600 LEVEL SWITCHES & MP 450S LEVEL GAUGE PROBES. PROVIDE COMPLETE FIRE SUPPRESSION SYSTEM FOR COVERAGE OF THE TANK AND DISPENSING SYSTEM. COORDINATE WITH ARCHITECTURAL STRUCTURE ABOVE TANK.
- FUEL OIL STORAGE TANK: SHALL BE ENVIRO-SAFE FIREGUARD 1,000 GALLON DOUBLE-WALL ABOVEGROUND FUEL OIL STORAGE TANK. PROVIDE STEEL SUPPORT SADDLES, LIFTING LUGS, 6" EMERGENCY VENT, 2" STACK VENT, 818 CLOCK GAUGE WITH FLOAT, 7.5 GALLON 4" ALUMINUM OVERSPILL CONTAINER 179 SERIES WITH HINGED STYLE FILL CAP, MEMCO 1" RETURN LINE, 1.5" PICKUP WITH DROP TUBE AND FOOT VALVE 6" FROM BOTTOM TANK, INTERSTITIAL LEAK GAUGE, STEP LADDER WITH PLATFORM, & 16" MAN-WAY. TANK SHALL BE PROVIDED WITH EPOXY PRIMER & ACRYLIC POLYURETHANE COATING, UL2085 LABELED AND LISTED, NFPA-30-30A TESTED, 2-HOUR FIRE TESTED, IMPACT AND BALLISTIC TESTED. 56" DIAMETER X 150" LONG; DRY WEIGHT: 5,800 LBS. PROVIDE PNEUMERCATOR LS-600 LEVEL SWITCHES & MP 450S LEVEL GAUGE PROBES. PROVIDE COMPLETE FIRE SUPPRESSION SYSTEM FOR COVERAGE OF THE TANK. COORDINATE WITH ARCHITECTURAL STRUCTURE ABOVE TANK.
- TANK LEVEL MONITORING SYSTEM: SHALL BE BASED ON PNEUMERCATOR TMS3000 SERIES MODULAR MULTI-TANK GAUGING SYSTEM WITH EPA COMPLIANT IN TANK AND SECONDARY CONTAINMENT LEAK DETECTION; ELECTRICAL: 115/230V/1/60. PROVIDE (1) MONITORING SYSTEM AT THE MAINTENANCE BUILDING FOR MONITORING OF THE GASOLINE, DIESEL, AND FUEL OIL TANKS. PROVIDE (1) MONITORING SYSTEM AT THE CART STORAGE BUILDING FOR MONITORING OF THE GASOLINE TANK.

IN CHARGE OF JW
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 OLA Consulting Engineers 60 Broadway, Hawthorne, New York 10632 914.747.2600 8 West 38th Street, Suite 501 New York, NY 10018 646.849.4110 ola.com	

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WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS DIVISION OF ENGINEERING		CONTRACT NUMBER 17 - 539	SHEET NUMBER P-001
NEW GOLF CART STORAGE FACILITY AND CLUBHOUSE UPGRADES MOHANSIC GOLF COURSE, YORKTOWN, NEW YORK PLUMBING SYMBOLS, ABBREVIATIONS, & NOTES		SCALE: NONE DATE: 6/4/21	SHEET NO. 29 OF 59 DPW FILE NO. 10-02-P-62-0