EQUIPMENT LIST FOR HRPS

Item Number	Description	Manufacturers	Quantities	Locations
1.	1" Diameter Potable Water Service Line, Type K Copper Pipe ½" and ¼" SS Sch. 40 Pipes	Mueller Industries	40 linear feet (1") 1 linear feet (1/2") 1 linear feet (1/4")	HRPS Garage and Repair Shop
2.	1" RPZ Assembly (backflow prevention devices)	Watts Water Technologies Inc. Model # LF009	One (1)	HRPS Garage and Repair Shop
3.	1" Pressure Reducing Valve	CLA-VAL Model CRD-L	One (1)	HRPS Garage and Repair Shop
4.	Water Meter	Provided by Town of Wappinger	One (1)	HRPS Garage and Repair Shop
5.	1" Ball Valve ½" and ¼" Ball Valve-Female NPT SS TP 316 material	Stockham Valves	One (1)	HRPS Garage and Repair Shop
6.	1" Gate Valves	Stockham Valves	Two (2)	HRPS Garage and Repair Shop
7.	Diaphragm Pressure Gauge Assembly ½" Type 316 Bolted Stainless Steel Diaphragm Gauge Isolator with ¼" Female NPT Type 316 Stainless Steel Ball Valve Connection ½" Stainless Steel Snubber	Ashcroft S.S. Pressure Gauge Bourdon Tube Type, 4" Diameter Readout, Pressure Ranges: 0 - 200 psi	One (1)	HRPS Garage and Repair Shop
8.	1-inch thick Rigid Polyisocyanurate Thermal Insulation	TRYMER 1800 by ITW Insulation Systems	40 linear feet	HRPS Garage and Repair Shop
9.	Self-regulating Heating Tracing Cable	Chromalox Model SRL5-1CT	100 linear feet	HRPS Garage and Repair Shop
10.	Ground-fault Protection Circuit Breaker	Square D	One (1)	HRPS Garage and Repair Shop
11.	Heat Tracing Control Panel	Square D	One (1)	HRPS Garage and Repair Shop
12.	Pipe Supports	Designed by Contractor	Ten (10)	HRPS Garage and Repair Shop
13.	Funnel Drain - Epoxy Coated Cast Iron Bolt-On	Watts Water Technologies Inc.	One (1)	HRPS Garage and Repair Shop
14.	2" Diameter Ductile Iron Drain Pipe and Fittings	American Cast Iron Company	20 linear feet	HRPS Garage and Repair Shop
15	Wall penetration sleeve as per Detail-1	Install foam protection board prior to backfill. Dry pack Non-Shrink grout. Rod to fill annular space.	Two (2)	HRPS Garage and Repair Shop

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE.
2. CONTACT TOWN OF WAPPINGERS BUILDING DEPARTMENT FOR INFORMATION ON WATER METER.
3. CONTRACTOR SHALL PATCH AND REPAIR TO THE SATISFACTION OF THE ENGINEER ALL AREAS EXPOSED DUE TO REMOVALS AND TO NEW CONSTRUCTION.
4. ALL NEW PIPING SHALL BE TYPE "K" COPPER PIPE THAT MEETS ASTM B88 REQUIREMENTS. ALL PIPES INSTALLATION SHALL BE SOLDERED AND EQUIPMENTS SHALL BE CONNECTED WITH COUPLINGS AND/OR THREADED CONNECTION AS REQUIRED. AFTER INSTALLATION PIPING SHALL BE HYDROTESTED @ 150 PSI FOR AN HOUR. ALL BURIED PIPING SHALL BE @ 4' MINIMUM BELOW GRADE LEVEL TO AVOID FREEZING.
5. ALL NEW PIPING INSIDE & OUTSIDE GARAGE EXPOSED TO ATMOSPHERE SHALL BE INSULATED WITH 1" THICK RIGID POLYISOCYANURATE THERMAL INSULATION.
6. CONTRACTOR SHALL FURNISH AND INSTALL SELF-REGULATING HEATING CABLE WITH ALL NECESSARY ACCESSORIES FOR ALL NEW PIPING FOR FREEZE PROTECTION. HEATING CABLE SHALL BE CHROMALOX MODEL SRL5-1CT WITH A MINIMUM RATING OF 5 WATTS PER FOOT LENGTH OF CABLE.
7. PRESSURE REDUCING VALVE SHALL BE AS SPECIFIED ON DRAWING HRPS-M-300.
8. NEW PIPING SHALL BE SUPPORTED AS RECOMMENDED BY MANUFACTURERS. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR DEP REVIEW AND APPROVAL.
9. CONTRACTOR SHALL FURNISH AND INSTALL A NEW GROUND-FAULT PROTECTION CIRCUIT BREAKER, RATED 15A, 120V, SINGLE PHASE IN THE EXISTING ELECTRICAL LIGHTING PANEL AS INDICATED IN THIS DRAWING. CONTRACTOR SHALL FURNISH AND INSTALL HEAT TRACING POWER CABLES AND CONDUIT FROM THE NEW 15A CIRCUIT BREAKER TO THE HEAT TRACING CABLE. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS, INCLUDING NEC AND THE BUILDING CODE OF THE TOWN OF WAPPINGER.
10. CONTRACTOR SHALL FURNISH AND INSTALL A HEAT TRACING CONTROL PANEL IN CONVENIENT LOCATION IN THE GARAGE AS APPROVED BY THE ENGINEER. THE HEAT TRACING CONTROL PANEL DISPLAY SHALL HAVE MINIMUM OF THE FOLLOWING FUNCTION: DISPLAYS OF HEAT TRACING ON/OFF, ROOM TEMPERATURE, HEAT TRACING SYSTEM FAULT, AND CLOCK. HEAT TRACING CABLE ON/OFF ADJUSTABLE TEMPERATURE SETTING KEY.
11. AFTER BACKFLOW PREVENTION DEVICE HAS BEEN INSTALLED, IT SHALL BE TESTED BY A CERTIFIED TESTER.
12. DRAIN LINES TO BE THREADED WITH TEFLON TAPE.
13. EQUIPMENT TYPES AND QUANTITIES LISTED IN TABLE.
14. PROVIDE SHOP DRAWINGS FOR THE ENGINEER'S REVIEW AND APPROVAL.

BID SET
DATE ISSUED: 9/29/2017

GRAPHIC SCALES
CHECK BEFORE USE
IF SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT. SCALE ACCORDINGLY

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CHECKED BY: MP
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SECTION MANAGER: NB

PROJECT MANAGER
CHIEF, TUNNEL DESIGN
DIRECTOR, IN HOUSE DESIGN
PATRICK O'CONNOR

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HUDSON RIVER PUMPING STATION IMPROVEMENTS
MECHANICAL
GENERAL NOTES AND EQUIPMENT TABLE

DATE: 9/29/2017
SCALE: N.T.S.
SHEET NO: 9 OF 9
DRAWING NO. HRPS-M-301.00

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