**SECTION 336053 -** **IDENTIFICATION FOR STEAM UTILITY DISTRIBUTION**

1. GENERAL
   1. RELATED DOCUMENTS
      1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification sections, apply to this section.
   2. SUMMARY
      1. Provide all labor, materials, and equipment as necessary to complete all work as indicated on the Drawings and as specified herein.
      2. Section Includes: Furnishing and installation of mechanical identification devices.
      3. Related sections:
         1. Division 33 Section “Utility Distribution General Requirements.”
   3. REFERENCES
      1. ANSI/ASME A13.1 - Scheme for the Identification of Piping Systems
      2. OSHA 29 CFR Part 1910 - Occupational Exposures to Hazardous Chemicals in Laboratories
   4. QUALITY ASSURANCE
      1. Identification devices shall conform to applicable codes and standards listed in Division 01 and Division 33 Section “Utility Distribution General Requirements,” except as otherwise modified and supplemented herein.
         1. ANSI/ASME A13.1.
         2. OSHA 29 CFR Part 1910.
2. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturers: Seton Name Plate Co., Emed, Marking Services Inc., or approved equal.
   2. PIPE MARKERS
      1. Indoor pipe size 6" and smaller shall be labeled using Setmart “Snap-Around Markers”, or approved equal. Indoor pipe over 6" in size shall be labeled using Setmart “Strap-Around Markers”, or approved equal.
      2. Outdoor pipe over 6" in size shall be labeled using Setmart “Ultra-mart”, or approved equal.
      3. Legends shall be as follows:
         1. High Pressure Condensate
         2. Medium Pressure Condensate
         3. Low Pressure Condensate
         4. Pumped Condensate
         5. High Pressure Steam (80 PSI and above)
         6. Medium Pressure Steam (16 PSI to 80 PSI)
         7. Low Pressure Steam (15 PSI and below)
   3. IDENTIFICATION OF VALVES
      1. Valve tags shall be 19 gauge brass, 1-1/2" diameter round with 3/16" top hole. Each tag shall be stamped and black filled with 1/4" service indicator on the top line and 1/2"numbers below. No painted tags will be accepted. Tags shall be fastened to valves with #16 solid brass jack chain.
      2. Number sequences shall be from 1 thru 999 with top line legends as follow:
         1. Low Pressure Steam LPS
         2. Medium Pressure Steam MPS
         3. High Pressure Steam HPS
         4. Low Pressure Condensate LPC
         5. Medium Pressure Condensate MPC
         6. High Pressure Condensate HPC
         7. Pumped Condensate PC
   4. IDENTIFICATION OF EQUIPMENT
      1. Equipment nameplates shall be engraved laminated plastic, large enough to be easily read, and in general attached by two (2) screws.
3. EXECUTION
   1. INSTALLATION
      1. Pipe Labeling:
         1. Pipe lines in accessible locations such as tunnels, equipment rooms, equipment crawl spaces, etc., and in exposed areas at each riser, shall be marked with appropriate markers and flow arrows.
         2. Markers shall be applied adjacent to valves, branch connections, where pipes pass through walls and floors, at major changes in direction, and every 50' in a straight run.
         3. Pipe or insulation surface shall be clean and dust free before the label is applied.
      2. Valve Labeling:
         1. Valves and regulators (except those directly serving equipment) shall be provided with a brass tag securely wired in place on the valve stem below the packing gland nut. Tags shall clearly indicate the part of system controlled by the valve.

END OF SECTION 336053