SECTION 330553 - IDENTIFICATION FOR UTILITIES PIPING AND EQUIPMENT

This section includes nameplates, labeling, and identification methods for site utilities piping, valves, equipment, and accessories.

This section includes performance, proprietary, and descriptive type specifications. Edit to avoid conflicts among requirements.

1. GENERAL
	* + 1. SUMMARY
				1. Section Includes:

Nameplates.

Tags.

Stencils.

Pipe markers.

Ceiling tacks.

Labels.

Lockout devices.

* + - * 1. Related Requirements:

List other Sections directly related to or affecting Work of this Section. Include Sections specifying information expected to be found in this Section as well as Sections required to describe complete system or assembly requirements.

Section 099114 – Exterior Painting: Execution requirements for painting specified by this Section.

Section 331413 - Public Water Utility Distribution Piping: Materials and methods for piping, valves, and appurtenances.

Section 331416 - Site Water Utility Distribution Piping: Materials and methods for piping, valves, and appurtenances.

Section 333100 - Sanitary Sewerage Piping: Materials and methods for piping, valves, and appurtenances.

Section 333213 - Packaged Wastewater Pumping Stations: Materials and methods for piping, valves, pumps, and other station equipment.

Section 333126 - Sanitary Pressure Sewer Piping: Materials and methods for piping, valves, appurtenances, and grinder pumps.

Section 333123 - Sanitary Sewerage Force Main Piping: Materials and methods for piping, valves, and appurtenances.

Section 334200 – Stormwater Conveyance: Materials and methods for piping, valves, and appurtenances.

* + - 1. REFERENCE STANDARDS

List reference standards included within text of this section. Edit the following for project conditions.

* + - * 1. American Society of Mechanical Engineers:

ASME A13.1 - Scheme for the Identification of Piping Systems.

* + - 1. SUBMITTALS

Only request submittals needed to verify compliance with project requirements.

* + - * 1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Product Data: Submit manufacturer's catalog literature for each product required.
				5. Shop Drawings: Submit list of wording, symbols, letter size, and color-coding for mechanical identification and valve chart and schedule, including valve tag number, location, function, and valve manufacturer's name and model number.

Include the following paragraph for submission of physical samples for selection of finish, color, texture, and other properties.

* + - * 1. Samples: Submit [**two**] [**tags**] [**labels**] [**pipe markers**] [**and**], for each size used on Project.
				2. Manufacturer's Installation Instructions: Indicate installation instructions, special procedures, and installation.
				3. Manufacturer's Certificate: Certify that [**products**] meet or exceed [**specified requirements**].

Include separate paragraphs for additional certifications.

* + - * 1. Qualifications Statements:

Coordinate following subparagraph with the requirements specified in qualifications article.

Submit qualifications for manufacturer.

* + - 1. CLOSEOUT SUBMITTALS
				1. Project Record Documents: Record actual locations of tagged valves; include valve tag numbers. Provide a drawing identifying the locations of all tagged valves and valve numbers.
			2. MAINTENANCE MATERIAL SUBMITTALS
				1. Extra Stock Materials: Furnish [**two**] [**containers of spray-on adhesive**].
				2. Tools: Furnish special [**crimpers**] and other devices required for Director’s Representative to re-install tags.
			3. QUALITY ASSURANCE

Include this article to specify compliance with overall reference standards affecting products and installation included in this section.

* + - * 1. Conform to ASME A13.1 for color scheme for identification of piping systems and accessories.

Include following paragraph only when cost of acquiring specified standards is justified.

* + - * 1. Maintain [**copy**] [<\_\_\_> **copies**] of each standard affecting the Work of this Section on-Site.
			1. QUALIFICATIONS

Coordinate following paragraph with the requirements specified in submittals article.

* + - * 1. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum [**three**] years' [**documented**] experience.
1. PRODUCTS
	* + 1. NAMEPLATES
				1. Manufacturers:

Craftmark Pipe Markers, (800) 627–5255, 212 S. Cravens Road, Fort Worth TX 76119.

Kolbi Pipe Marker Co. (800) 499-8450, 416 Campus Drive, Arlington Heights IL 60004.

Pipemarker.com; Brimar Industries, Inc. (800) 274-6271, 64 Outwater Lane, Garfield NJ 07026.

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

Approved equivalent.

* + - * 1. Description: Laminated three-layer plastic with engraved [**black**] letters on light, contrasting background color.
			1. TAGS
				1. Plastic Tags

Manufacturers:

Craftmark Pipe Markers, (800) 627–5255, 212 S. Cravens Road, Fort Worth TX 76119.

Kolbi Pipe Marker Co. (800) 499-8450, 416 Campus Drive, Arlington Heights IL 60004.

Pipemarker.com; Brimar Industries, Inc. (800) 274-6271, 64 Outwater Lane, Garfield NJ 07026.

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

Brady ID, (888) 250-3082, 6555 W. Good Hope Road, Milwaukee WI 53223.

Marking Services, Inc, (800) 234-0135, 8265 N. Faulkner Road, Milwaukee WI 53224

R & R Identification Co., (626) 915-2241, 576 E. Edna Place, Covina, CA 91723

Approved equivalent.

Description:

Laminated three-layer plastic with engraved [**black**] letters on light, contrasting background color.

Minimum Tag Size and Configuration: 1-1/2 inch; [**diameter**] [**square**].

* + - * 1. Metal Tags

Manufacturers:

Craftmark Pipe Markers, (800) 627–5255, 212 S. Cravens Road, Fort Worth TX 76119.

Kolbi Pipe Marker Co. (800) 499-8450, 416 Campus Drive, Arlington Heights IL 60004.

Pipemarker.com; Brimar Industries, Inc. (800) 274-6271, 64 Outwater Lane, Garfield NJ 07026.

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

Brady ID, (888) 250-3082, 6555 W. Good Hope Road, Milwaukee WI 53223.

Marking Services, Inc, (800) 234-0135, 8265 N. Faulkner Road, Milwaukee WI 53224

R & R Identification Co., (626) 915-2241, 576 E. Edna Place, Covina, CA 91723

Approved equivalent.

Description:

[**Brass**] [**Aluminum**] [**Stainless-steel**] construction; stamped letters.

Minimum Tag Size and Configuration: [1-1/2 inch]; [**diameter**] [**square**] with finished edges.

* + - * 1. Information Tags

Manufacturers:

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

Brady ID, (888) 250-3082, 6555 W. Good Hope Road, Milwaukee WI 53223.

Approved equivalent.

Description:

Clear plastic with printed [**DANGER**] [**CAUTION**] [**WARNING**] and message.

Minimum Tag Size: [3-1/4] by [5-5/8] inch.

Furnish grommet and self-locking nylon ties.

Tag Chart: Typewritten, letter-size list of applied tags and location [**, in anodized aluminum frame**] [**, plastic laminated**].

* + - 1. STENCILS
				1. Manufacturers:

Kolbi Pipe Marker Co. (800) 499-8450, 416 Campus Drive, Arlington Heights IL 60004.

Pipemarker.com; Brimar Industries, Inc. (800) 274-6271, 64 Outwater Lane, Garfield NJ 07026.

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

Marking Services, Inc, (800) 234-0135, 8265 N. Faulkner Road, Milwaukee WI 53224

R & R Identification Co., (626) 915-2241, 576 E. Edna Place, Covina, CA 91723

Approved equivalent.

* + - * 1. Description:

Clean-cut symbols.

Letters:

Up to [2]-inch Outside Diameter of Insulation or Pipe: [1/2]-inch-high letters.

[2-1/2]- to [6]-inch Outside Diameter of Insulation or Pipe: [1]-inch-high letters.

Over [6]-inch Outside Diameter of Insulation or Pipe: [**1-3/4-inch**] -high letters.

* + - * 1. Stencil Paint: As specified in Section 099114 – Exterior Painting; semigloss enamel.
				2. Color-Coding and Lettering Size: Conform to ASME A13.1.
			1. PIPE MARKERS
				1. Color-Coding and Lettering Size: Conform to ASME A13.1.
				2. Plastic Pipe Markers

Manufacturers:

Craftmark Pipe Markers, (800) 627–5255, 212 S. Cravens Road, Fort Worth TX 76119.

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

Brady ID, (888) 250-3082, 6555 W. Good Hope Road, Milwaukee WI 53223.

Marking Services, Inc, (800) 234-0135, 8265 N. Faulkner Road, Milwaukee WI 53224

R & R Identification Co., (626) 915-2241, 576 E. Edna Place, Covina, CA 91723

Approved equivalent.

Description:

Factory-fabricated, flexible, semi-rigid plastic.

Preformed to fit around pipe or pipe covering.

Larger sizes may have maximum sheet size with spring fastener.

* + - * 1. Plastic Tape Pipe Markers

Manufacturers:

Craftmark Pipe Markers, (800) 627–5255, 212 S. Cravens Road, Fort Worth TX 76119.

Kolbi Pipe Marker Co. (800) 499-8450, 416 Campus Drive, Arlington Heights IL 60004.

Pipemarker.com; Brimar Industries, Inc. (800) 274-6271, 64 Outwater Lane, Garfield NJ 07026.

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

Brady ID, (888) 250-3082, 6555 W. Good Hope Road, Milwaukee WI 53223.

Marking Services, Inc, (800) 234-0135, 8265 N. Faulkner Road, Milwaukee WI 53224

Approved equivalent.

Description: Flexible, vinyl film tape with pressure-sensitive adhesive backing and printed markings.

* + - * 1. Plastic, Underground Pipe Markers

Manufacturers:

Kolbi Pipe Marker Co. (800) 499-8450, 416 Campus Drive, Arlington Heights IL 60004.

Pipemarker.com; Brimar Industries, Inc. (800) 274-6271, 64 Outwater Lane, Garfield NJ 07026.

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

Marking Services, Inc, (800) 234-0135, 8265 N. Faulkner Road, Milwaukee WI 53224

Rhino Marking and Protection Systems, (800) 522-4343, 10740 Lyndale Avenue South - Suite 16W, Bloomington MN 55420.

Approved equivalent.

Description:

Brightly colored, continuously printed, plastic ribbon tape.

Minimum 6 inches wide by 4 mils thick.

Manufactured for direct burial service.

* + - 1. CEILING TACKS
				1. Manufacturers:

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

R & R Identification Co., (626) 915-2241, 576 E. Edna Place, Covina, CA 91723

Marking Services, Inc, (800) 234-0135, 8265 N. Faulkner Road, Milwaukee WI 53224.

Approved equivalent.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

In following subparagraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

Furnish materials according to <**Insert Agency/Municipality**> standards.

* + - * 1. Description:

Steel construction.

Head: [3/4]-inch diameter; color-coded.

* + - * 1. Color-Coding and Lettering Size: Conform to ASME A13.1.
			1. LABELS
				1. Manufacturers:

Brady ID, (888) 250-3082, 6555 W. Good Hope Road, Milwaukee WI 53223.

Seton Identification Products; a Brady Corporation Company, (800) 243-6624, 2491 Wehrle Drive, Buffalo NY 14221.

Approved equivalent.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

In following subparagraph insert "State of New York Department of Transportation," "Municipality of \_\_\_\_\_\_\_\_ Department of Public Works," or other agency as appropriate.

Furnish materials according to <**Insert Agency/Municipality**> standards.

* + - * 1. Description:

[**Aluminum**] [**Polyester**] [**Laminated Mylar**] construction.

Minimum Size: [1.9] by [0.75] inch.

Adhesive backed, with printed identification [**and bar code**].

* + - 1. LOCKOUT DEVICES
				1. Lockout Hasps

Manufacturers:

Master Lock Company. LLC, (800) 464-2088, 2600 N 32nd St, Milwaukee, WI 53210.

Brady ID, (888) 250-3082, 6555 W. Good Hope Road, Milwaukee WI 53223.

Approved equivalent.

Description:

[Anodized aluminum] [Reinforced nylon] construction.

Furnish hasp with erasable label surface.

Minimum Size: [7-1/4] by [3] inches.

* + - * 1. Valve Lockout Devices

Manufacturers:

Master Lock Company. LLC, (800) 464-2088, 2600 N 32nd St, Milwaukee, WI 53210.

Brady ID, (888) 250-3082, 6555 W. Good Hope Road, Milwaukee WI 53223.

Approved equivalent.

Description:

[**Nylon**] [**Steel**] [**Plastic**] construction.

Furnish device preventing access to valve operator and accepting lock shackle.

1. EXECUTION
	* + 1. PREPARATION
				1. Degrease and clean surfaces to receive adhesive for identification materials.
				2. Prepare surfaces as specified in Section 099114 – Exterior Painting for stencil painting.
			2. INSTALLATION
				1. Apply stencil painting as specified in Section 099114 – Exterior Painting.
				2. Install identifying devices after completion of coverings and painting.
				3. Install plastic nameplates with corrosion-resistant mechanical fasteners or adhesive.
				4. Labels:

Install labels with sufficient adhesive for permanent adhesion and seal with clear lacquer.

For unfinished covering, apply paint primer before applying labels.

* + - * 1. Tags:

Install tags using corrosion-resistant chain.

Number tags [**consecutively by location**] [**as indicated in tag schedule**].

* + - * 1. Install underground plastic pipe markers [**6**] to [**8**] inches below finished grade, directly above buried pipe.
				2. Identify valves in main and branch piping with tags.
				3. Piping:

Identify piping, concealed or exposed, with [**plastic pipe markers**] [**plastic tape pipe markers**] [**stenciled painting**].

[**Use tags on piping 3/4-inch diameter and smaller.**]

Identify service, flow direction, and pressure.

Install in clear view and align with axis of piping.

Locate identification not to exceed 20 feet on straight runs, including risers and drops, adjacent to each valve and tee, at each side of penetration of structure or enclosure, and at each obstruction.

* + - * 1. Ceiling Tacks:

Provide ceiling tacks to locate valves above T-bar-type panel ceilings.

Locate in corner of ceiling panel closest to equipment.

* + - 1. ATTACHMENTS

When relying on separate schedules, tables, illustrations, or forms to specify product requirements, include list of each attachment. Include identical list of attachments in project manual table of contents.

Insert attachments following end of section.

Consider following examples when developing project schedule.

* + - * 1. Identification:

<**\_\_\_\_\_\_\_\_**>.

Identification Type: <**\_\_\_\_\_\_\_\_**>.

Background Size: <**\_\_\_\_\_\_\_\_**>.

Background Color: <**\_\_\_\_\_\_\_\_**>.

Lettering Size: <**\_\_\_\_\_\_\_\_**>.

Lettering Color: <**\_\_\_\_\_\_\_\_**>.

* + - * 1. Valve Tags:

<**\_\_\_\_\_\_\_\_**>.

Tag Material: <**\_\_\_\_\_\_\_\_**>.

Tag Size: <**\_\_\_\_\_\_\_\_**>.

Tag Shape: <**\_\_\_\_\_\_\_\_**>.

Tag Color: <**\_\_\_\_\_\_\_\_**>.

END OF SECTION 330553