

National Spatial Data Infrastructure

Utilities Data Content Standard

Facilities Working Group
Federal Geographic Data Committee

June 2000

Federal Geographic Data Committee

Established by Office of Management and Budget Circular A-16, the Federal Geographic Data Committee (FGDC) promotes the coordinated development, use, sharing, and dissemination of geographic data.

The FGDC is composed of representatives from the Departments of Agriculture, Commerce, Defense, Energy, Housing and Urban Development, the Interior, State, and Transportation; the Environmental Protection Agency; the Federal Emergency Management Agency; the Library of Congress; the National Aeronautics and Space Administration; the National Archives and Records Administration; and the Tennessee Valley Authority. Additional Federal agencies participate on FGDC subcommittees and working groups. The Department of the Interior chairs the committee.

FGDC subcommittee's work on issues related to data categories coordinated under the circular. Subcommittees establish and implement standards for data content, quality, and transfer; encourage the exchange of information and the transfer of data; and organize the collection of geographic data to reduce duplication of effort. Working groups are established for issues that transcend data categories.

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1. INTRODUCTION

Utility systems currently lack a national geospatial data content standard for use in supporting engineering and life-cycle maintenance. In the past there has been considerable interest from facilities engineers, public works offices, and utility companies in the availability of a comprehensive data content standard that would support of utilities. Development of this Utilities Standard through the FGDC will address this need through broad participation including national, state, and local governments, municipalities, professional associations, and private industry.

This Utilities Standard will benefit Federal, state, and local governments, municipalities and utility companies that require a utilities data content standard. This Utilities Standard may also be used to support the FGDC's integrated standard database project. This standard will also provide new data sharing opportunities for the National Spatial Data Infrastructure (NSDI).

1.1 OBJECTIVE

The purpose of this Utilities Geospatial Data Content Standard (hereafter in this document abbreviated to Utilities Standard) is to standardize geospatial information for utility systems. This standard specifies the names, definitions and domains for utility system components that can be geospatially depicted as feature types and their non-graphical attributes. This Utilities Standard is classified as a **Data Content Standard** in the Federal Geographic Data Committee (FGDC) Standards Reference Model.

1.2 SCOPE

This Utilities Standard supports large-scale, intra-city applications such as engineering and life cycle maintenance of utility systems. The components of each utility system described in this Utility Standard are considered to represent features located outside the foundation of an enclosed structure. This Utilities Standard describes eleven feature classes: compressed air, electrical distribution, electrical monitoring/control, fuel distribution, heating/cooling systems, industrial waste, natural gas distribution, saltwater, storm drainage collection, wastewater collection, and water distribution. This standard does not contain all features necessary to describe or model communications, alarm systems, or long distance utilities networks that stretch between cities. As with the Spatial Data Transfer Standard (SDTS), this Standard uses a logical data model (described in section 3).

1.3 APPLICABILITY

This Utilities Standard is applicable for any system that captures or uses spatial data about utility systems (i.e., compressed air, electrical distribution, electrical monitoring/control, fuel distribution, heating/cooling systems, industrial waste, natural gas distribution, saltwater, storm drainage collection, wastewater collection, and water distribution) and can be utilized in support of life-cycle management applications i.e., planning, design, construction, and facilities management (FM). For example, this standard is applicable to support life-cycle management of a building complex natural gas distribution system or to support the management/maintenance of a private/public water distribution system.

1.4 RELATED STANDARDS

This Utilities Standard was developed from the utilities information contained in the Spatial Data Standard for Facilities, Infrastructure, and Environment (SDSFIE) developed by the CAD/GIS Technology

Center for Facilities, Infrastructure and Environment of the U.S. Army Corps of Engineers Engineer Research and Development Center (CEERDC) (<http://tsc.wes.army.mil/>). On October 5th, 1999 the FGDC Coordination Working Group met and voted to accept the CAD/GIS Technology Center for Facilities, Infrastructure and Environment to replace and represent the FGDC Facilities Working Group within the FGDC. It is anticipated that this Utilities Standard will continue to harmonize its content with future SDSFIE versions as strictly a logical model.

This Utility Standard is also designed to work with the FGDC Data Content Standard for Location and Identification of Facilities. Each feature in this standard is provided with an attribute titled "Facility Identifier", which is designated as a foreign link identifying the larger facility of which the feature belongs. As required, this attribute can be used to hold twenty characters representing a facility identification.

1.5 STANDARD DEVELOPMENT PROCESS

The Utilities project team under the guidance of the Facilities Working Group originally developed this standard. The utilities system information contained in this standard was originally extracted from the Tri-Services Spatial Data Standards and Tri-Service Facility Management Standards (TSSDS) which has since been renamed the Spatial Data Standard for Facilities, Infrastructure, and Environment (SDSFIE). During the development process the project team examined the information and structure of the SDSFIE and decided to use only its logical data model (feature, attribute, and domain information). It was determined that the physical data model contained in the SDSFIE, which supports specific implementations (i.e., generates feature schema for a number of common relational GIS/CADD systems), was inappropriate for use in NSDI standards. Additional departures from the SDSFIE include a new set of shortened common names for features, which would facilitate hardcopy reproduction of the finished standard.

In August of 1997 the FGDC Standards Working Group released this standard for a six-month public review period. During this time, in addition to being on the FGDC FWG web site, this standard was also presented at the Pennsylvania Mapping And Geographic Information Consortium (PaMAGIC) Summit and the New England Chapter of AM/FM International later that year. In May of 1998 the public review period was extended an additional six months. During the entire public review period the FGDC Facilities Working Group did not receive any comments to adjudicate.

Beginning in July of 1998 a number of data dictionaries and data entry requirements were collected from regional utility organizations and examined for content and organization. The purpose of this task was to broaden the standard to better reflect Utility related feature management as used by non-federal utility managers.

With the completion of this examination, and based on the judgment of the Facilities Working Group, the following changes were incorporated into this final draft standard:

1. Fuel Catch Basin Area feature was added to the Fuel System Class.
2. Anode Points and their respective test stations and rectifiers were added to the Industrial, Saltwater, and Wastewater System Classes.
3. Compressed Air and Saltwater Utility Classes from the SDSFIE, which were not present in the original FGDC Utility Standard, have been added.

The Utilities Project Team had participants from Federal agencies, professional societies, and local governments, and private industry. Specifically the following organizations were significantly involved in the development of this standard:

1. U.S. Army Corps of Engineers
2. American Public Works Association
3. Environmental Protection Agency
4. Applied Geographics, Inc.

This Utility Standard has been implemented in hundreds of GIS and CADD/Facilities Management systems using the SDSFIE for specific implementation guidance. Detailed information about implementing this Utilities Standard using the SDSFIE physical data model is available for ESRI's ARC/INFO and Integraph's MGE GIS systems. This information is available as an example of how to implement this Utilities Standard and is not intended to mandate or recommend any vendors software.

1.6 MAINTENANCE AUTHORITY

The Department of Defense, U.S. Army Corps of Engineers maintains the Utilities Standard in a Federal Geographic Data Committee approved format, appropriate for a NSDI use, and reflecting SDSFIE development by the CADD/GIS Technology Center for Facilities, Infrastructure and Environment. All general questions and comments concerning this standard should be addressed to:

**U. S. Army Corps of Engineers
General Engineering Branch
20 Massachusetts Avenue, NW
Washington, DC 20314-1000**

All technical question and comments pertaining to this standard should be directed to:

**The CADD/GIS Technology Center for Facilities, Infrastructure, and Environment ATTN:
CEERDC, 3909 Halls Ferry Road, Vicksburg, MS 39180-6199**

2. PARTS OF THE STANDARD

This Utilities Standard consists of a list of definitions, a logical data model, and five appendices. The main body of the Utilities Standard defines the purpose of this standard, the process followed during its development, the organization(s) involved in its development and maintenance, and its relationship to other standards. Appendix A lists and defines the Feature Classes for this Utility Standard. Appendix B contains a comprehensive Feature Types report which is grouped by associated classes and lists the utilities feature type names, definitions, the object types, and attribute table. Appendix C contains a comprehensive Attributes report which contains a complete listing of attributes associated with utilities feature types and each attributes name and definition, data type, character length, and associated domain name. Appendix D contains a Domains report, which contains a complete listing of domain names (and their definitions) and lists the potential values for each domain (and defines each value.)

In Appendix B, attribute tables for each feature type have been grouped by their anticipated use in managing a utility database. This grouping is used in place of a single alphabetical attribute list for each feature and is intended to help with standard maintenance and use. This Utility Standard groups attributes by the following subjects:

1. Database connectivity. (e.g., feature ID, foreign links, coordinate values, ...)
2. Physical Properties of utility item. (e.g., dimensions, model type, material, style, area, slope, ...)
3. Performance related information. (e.g., capacity, rate of flow, min/average/max use, ...)
4. Maintenance of the utility item. (e.g., date acquired, user flag, switch status, inspections, ...)

In Appendix D, a number of the domain lists are for proper names (e.g., reservoir names, utility company names, ...). The domains that list proper names are intended to be exemplary. The specific values (proper names) used by an organization or locality may vary geographically. Therefore, Appendix D is informative (not mandatory) and is not intended to standardize all domain values across the entire community of users of this standard. Whereas, Appendices A, B, and C are normative (i.e., mandatory parts of the standard.)

- Appendix A Feature Classes (normative)
- Appendix B Feature Types (normative)
- Appendix C Utilities Attributes (normative)
- Appendix D Utilities Domains (informative)

3. DEFINITIONS

For the purpose of this Utilities Standard, the following definitions apply.

3.1 **feature class** - a logical group of related feature types (e.g., grouping of water system components feature types such as water_hydrant, water_line, water_pump, water_reservoir, water_tank, etc. into a water system feature class).

3.2 **feature type** - definition and description of a set (class of real world phenomena) into which similar feature instances are classified (e.g., water_reservoir).

3.3 **feature instance** - real-world spatial phenomenon about which data is collected, maintained, and disseminated. (e.g., the McMillan Water Reservoir). Feature instances are the geospatial objects that are graphically delineated in a spatial database.

3.4 **attribute** - a defined characteristic of a feature type (e.g., an attribute of electrical cable feature type = electrical cable material).

3.5 **domain** - a finite list (or range) of permissible values for a specified attribute. Included are tables of: units of measure, types, styles, status, names, methods, materials, dispositions, sources, dimensions, data, classes, etc. (e.g., electrical cable material --Al, Fe, Pb, steel, Cu, . . .).

3.6 **attribute value** - a specific quality or quantity assigned to an attribute for a specific feature instance (e.g., electrical cable material = Cu).

3.7 **IDEF modeling** - Integrated Definition (IDEF) is the name given to a family of over 30 graphical modeling techniques. The IDEF₀ and IDEF_{1x} are the best known of these techniques. IDEF₀ techniques are used to describe business processes or activities for reengineering a function. IDEF_{1x} techniques are used to define business rules and create a logical data model.

3.8 **geospatial data** - data with implicit or explicit reference to a location relative to the earth.

3.9 **data content standard** - provides the semantic definitions for a set of real world spatial phenomena of significance to a community. Data Content Standards may be organized and presented in a specified logical data model such as an entity-relationship model or and IDEFIX model

3.10 **utilities** - a manmade component of a system that provides a service to the public.

4. LOGICAL DATA MODEL

Agreement on a common format is not sufficient to ensure that the geospatial information transferred is meaningful to both the sender and the receiver. In order to share spatial data (and as part of a SDTS data transfer process) a common data model must be defined and used. In addition, semantic content of a spatial database (i.e., the entities and associated attribute and attribute value information) must be well defined and agreed upon by an application community and specified in either an off-line document (i.e. data content standard and/or in the metadata for a given database.) Part 2 of the SDTS is a formal attempt to develop a standardized list of entities. Additionally application communities that want to share geospatial information are developing data content standards modeled after the SDTS data model.

This Utilities Standard data model (figure 1.) is based upon the SDTS geospatial data model as presented in Parts 1 and 2 of that standard. The SDTS data model depicts the real world represented by features, which are characterized by attributes that are assigned attribute values. This Utilities Standard defines utility system feature types and their attributes and specifies the domain (range or list) of attributes values. It also incorporates several additional extensions to the SDTS data model including the concept of grouping utility system components (feature types) into feature classes and linking specific attributes to specific feature types. Therefore, a Feature Class is defined as a collection of Feature Types. A particular Feature Type may also be present in many Feature Classes. Thus, a Feature Class list maintains a many-to-many relationship with a Feature Type list, also referred to as a Registry.

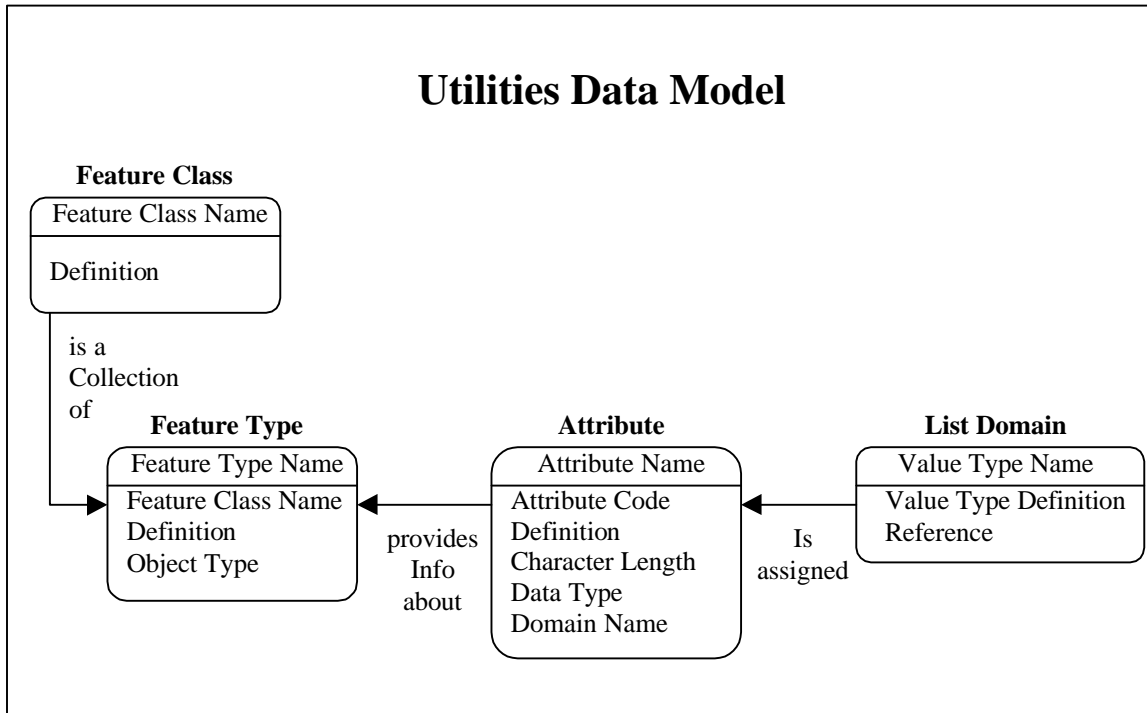


Figure 1

5. REFERENCES

CADD/GIS Technology Center for Facilities, Infrastructure and Environment (1997) "Tri-Service Spatial Data Standards", release 1.6.

CADD/GIS Technology Center for Facilities, Infrastructure and Environment (1996) "Tri-Service Spatial Data Standards ARC/INFO Technical Implementation Guide".

CADD/GIS Technology Center for Facilities, Infrastructure and Environment (1997) "Tri-Service Spatial Data Standards Modular GIS Environment Technical Implementation Guide".

National Institute of Standards and Technology (1992) Federal Information Processing Standard Publication 173 (Spatial Data Transfer Standard), U.S. Department of Commerce.

Appendix A: Feature Classes

(Normative)

FEATURE CLASS NAME	DEFINITION
Compressed Air System	The components of a compressed air system.
Control & Monitoring System	The components of an electronic monitoring and control (emcs) system including cables, devices, etc.
Electrical Exterior Lighting	The components of an electrical exterior lighting system including cables, switches, devices, transformers, etc.
Electrical System	The components of an electrical distribution system including cables, switches, devices, motors, transformers, etc.
Fuel System	The components of a fuel distribution system consisting of pipes, fittings, fixtures, pumps, tanks, etc.
General Utility Features	The components of a utility system which are universal in use and purpose and do not belong to a specific utility.
Heating & Cooling System	The components of a heating and cooling distribution system consisting of pipes, fittings, fixtures, etc.
Industrial System	The components of an industrial waste collection system including pipes, fittings, fixtures, tanks, lagoons, etc.
Natural Gas System	The components of a natural gas distribution system consisting of pipes, fittings, fixtures, etc.
Saltwater System	The components of a salt water collection system.
Storm System	The components of a storm drainage collection system including pipes, fittings, fixtures, etc.
Wastewater System	The components of a wastewater collection system including pipes, fittings, fixtures, treatment plants, collection locations, etc.
Water System	The components of a water system including pipes, fittings, valves, fixtures, treatment plants, etc.

Appendix B: Feature Types

(Normative)

FEATURE CLASS:**Compressed Air System**

FEATURE TYPE: **Compressed air drain sep point**

OBJECT TYPE: **Point**

DEFINITION: **Condensation drain in a compressed air line.**

FEATURE ATTRIBUTES FOR: Compressed air drain sep point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS:**Compressed Air System**

FEATURE TYPE: **Compressed air fitting point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting is an item used to connect, cap, plug or otherwise alter a pipe.**

FEATURE ATTRIBUTES FOR: Compressed air fitting point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

Compressed Air System Fitting Code

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS:**Compressed Air System**

FEATURE TYPE: **Compressed air flow direction arrow**

OBJECT TYPE: **Arrow**

DEFINITION: **An arrow indicating the direction of movement of compressed air.**

FEATURE ATTRIBUTES FOR: Compressed air flow direction arrow

DATABASE INTEGRATION:

PHYSICAL PROPERTIES:

PERFORMANCE:

OPERATION/MAINTENANCE:

FEATURE CLASS: **Compressed Air System**

FEATURE TYPE: **Compressed air pipe line**

OBJECT TYPE: **String/Chain**

DEFINITION: **A pipe used to carry compressed air from location to location**

FEATURE ATTRIBUTES FOR: Compressed air pipe line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Compressed Air System**

FEATURE TYPE: **Compressed air tank point**

OBJECT TYPE: **Point**

DEFINITION: **A chamber for holding compressed air prior to its use.**

FEATURE ATTRIBUTES FOR: Compressed air tank point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Compressed Air System**

FEATURE TYPE: **Compressed air valve pit point**

OBJECT TYPE: **Point**

DEFINITION: **A below grade chamber, too small to enter, containing one or more valves.**

FEATURE ATTRIBUTES FOR: Compressed air valve pit point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Compressed Air System**

FEATURE TYPE: **Compressed air valve point**

OBJECT TYPE: **Point**

DEFINITION: **A device to control flow through a compressed air line.**

FEATURE ATTRIBUTES FOR: Compressed air valve point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Control & Monitoring System**

FEATURE TYPE: **Energy control monitoring cable line**

OBJECT TYPE: **String/Chain**

DEFINITION: **Data transmission media, typically fiber optics or shielded twisted-pair.**

FEATURE ATTRIBUTES FOR: Energy control monitoring cable line

DATABASE INTEGRATION:

<u>Energy Control Monitoring Ductbank Identifier</u>	<u>Facility Identifier</u>	<u>From X Coordinate</u>
<u>From Y Coordinate</u>	<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>To X Coordinate</u>	<u>To Y Coordinate</u>
<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Number of Twisted Pairs Quantity</u>	<u>Number of Links Quantity</u>	<u>Loose Buffered Indicator Code</u>
<u>Length Unit Measure Code</u>	<u>Installation Type Code</u>	<u>Cable Type Code</u>
<u>Cable Sheath Type Code</u>	<u>Cable Material Code</u>	<u>Cable Length Dimension</u>
<u>Cable Dimension Code</u>		

PERFORMANCE:

<u>Decibel Loss Quantity</u>	<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS:Control & Monitoring System

FEATURE TYPE: Energy control monitoring device point OBJECT TYPE: **Point**

DEFINITION: Devices used in an energy monitoring/control system to collect, process or transmit data signals.

FEATURE ATTRIBUTES FOR: Energy control monitoring device point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Serial Number Code</u>	<u>Number of Twisted Pairs Quantity</u>	<u>Model Number Code</u>
<u>Pump Station Type Code</u>	<u>Spare Digital Outputs Quantity</u>	<u>Digital Output Number Amount</u>
<u>Digital Input Number Amount</u>	<u>Monitoring Device Type Discriminator</u>	<u>Manufacture Date</u>
<u>Spare Analog Outputs Amount</u>	<u>Number of Analog Outputs Amount</u>	<u>Spare Analog Inputs Amount</u>
<u>Number of Analog Inputs Amount</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Impedance Measure Amount</u>	<u>Impedance Unit Measure Code</u>
<u>Narrative Text</u>		

OPERATION/MAINTENANCE:

<u>Readout Display Type Code</u>	<u>Spare Digital Inputs Quantity</u>	<u>User Flag Text</u>
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FEATURE CLASS:Control & Monitoring System

FEATURE TYPE: Energy control monitoring ductbank line OBJECT TYPE: **String/Chain**

DEFINITION: A structure containing multiple conduits used to protect underground cables.

FEATURE ATTRIBUTES FOR: Energy control monitoring ductbank line

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>From X Coordinate</u>
<u>From Y Coordinate</u>	<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>To X Coordinate</u>	<u>To Y Coordinate</u>
<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Ductbank Voltage Code</u>	<u>Number of Spares Quantity</u>	<u>Ducts Quantity</u>
<u>Length Unit Measure Code</u>	<u>Material Code</u>	<u>Ductbank Size Code</u>
<u>Length Dimension</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Control & Monitoring System**

FEATURE TYPE: **Energy control monitoring junction point** OBJECT TYPE: **Point**

DEFINITION: **A box or small vault located below grade with above grade access where cables intersect, connect, or pass through.**

FEATURE ATTRIBUTES FOR: Energy control monitoring junction point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Energy Control Monitoring Junction Code</u>	<u>Serial Number Code</u>	<u>Model Number Code</u>
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PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Control & Monitoring System**

FEATURE TYPE: **Energy control monitoring marker point** OBJECT TYPE: **Point**

DEFINITION: **A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.**

FEATURE ATTRIBUTES FOR: Energy control monitoring marker point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>General Markers Type Code</u>	<u>Soil Consistency Code</u>	<u>Sign Width Dimension</u>
<u>Sign Text</u>	<u>Sign Material Composition Code</u>	<u>Sign Height Dimension</u>
<u>Pole Material Code</u>	<u>Pole Height Dimension</u>	<u>Pole Depth Dimension</u>
<u>Model Number Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rock Condition Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS:**Electrical Exterior Lighting**

FEATURE TYPE: **Exterior lighting point**

OBJECT TYPE: **Point**

DEFINITION: **Locations of point sources of general external lighting.**

FEATURE ATTRIBUTES FOR: Exterior lighting point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Electrical External Lighting Type Code</u>		
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PERFORMANCE:

OPERATION/MAINTENANCE:

<u>User Flag Text</u>		
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FEATURE CLASS:**Electrical System**

FEATURE TYPE: **Electrical bus line**

OBJECT TYPE: **String/Chain**

DEFINITION: **A rigid metallic conductor (copper or aluminum), typically in the form of a flat bar, angle stock, or square tubing.**

FEATURE ATTRIBUTES FOR: Electrical bus line

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>From X Coordinate</u>
<u>From Y Coordinate</u>	<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>To X Coordinate</u>	<u>To Y Coordinate</u>
<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Group Voltage Code</u>	<u>Group Neutral Conductor Size Code</u>	<u>Group Number of Neutral Conductors Quantity</u>
<u>Group Conductor Quantity</u>	<u>Frame Type Configuration Code</u>	<u>Group Material Composition Code</u>
<u>Basic Insulation Level Rating Code</u>		

PERFORMANCE:

<u>Cable Use Code</u>	<u>Disposition Code</u>	<u>Group Reactance Amount</u>
<u>Group Resistance Amount</u>	<u>Narrative Text</u>	

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical cable line**

OBJECT TYPE: String/Chain

DEFINITION: **A group of conductors used to carry electrical energy from point to point.**

FEATURE ATTRIBUTES FOR: Electrical cable line

DATABASE INTEGRATION:

<u>Electrical Ductbank Identifier</u>	<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>
<u>Feature Name</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>River Mile Reference Dimension</u>	<u>Cable Type Discriminator</u>	<u>Cable Group Voltage Code</u>
<u>Group Number of Phases Quantity</u>	<u>Group Number of Neutral Conductors Quantity</u>	<u>Group Conductor Quantity</u>
<u>Group Neutral Conductor Size Code</u>	<u>Length Unit Measure Code</u>	<u>Group Insulation Material Code</u>
<u>Cable Installation Type Discriminator</u>	<u>Group Conductor Size Code</u>	<u>Cable Mounting Configuration Type Code</u>
<u>Cable Material Code</u>	<u>Cable Length Dimension</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Phase Letter Code</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical capacitor point**

OBJECT TYPE: **Point**

DEFINITION: **An electrical device placed in a circuit to correct power factor by adding reactive power to the circuit.**

FEATURE ATTRIBUTES FOR: Electrical capacitor point

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Switch Phase Code</u>	<u>Serial Number Code</u>	<u>Model Number Code</u>
<u>Pump Station Type Code</u>	<u>Electrical Capacitor Unit Measure Code</u>	<u>Reactive Power Rating Code</u>
<u>Control Type Code</u>		

PERFORMANCE:

<u>Capacitor Voltage Code</u>	<u>Disposition Code</u>	<u>Narrative Text</u>
<u>Number of Phases Quantity</u>	<u>Phase Letter Code</u>	

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: Electrical System

FEATURE TYPE: Electrical ductbank line

OBJECT TYPE: String/Chain

DEFINITION: A tubular structure that provides protection for underground cables contained in conduit.

FEATURE ATTRIBUTES FOR: Electrical ductbank line

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>Feature Name</u>
<u>From X Coordinate</u>	<u>From Y Coordinate</u>	<u>From Z Coordinate</u>
<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>	<u>To X Coordinate</u>
<u>To Y Coordinate</u>	<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>River Mile Reference Dimension</u>	<u>Ductbank Voltage Code</u>	<u>Number of Spares Quantity</u>
<u>Ducts Quantity</u>	<u>Length Unit Measure Code</u>	<u>Material Code</u>
<u>Ductbank Size Code</u>	<u>Length Dimension</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical generator point**

OBJECT TYPE: **Point**

DEFINITION: **A machine which converts mechanical energy into electrical energy.**

FEATURE ATTRIBUTES FOR: Electrical generator point

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Permit Number Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Generator Voltage Code</u>	<u>Sound Dampening Insulation Code</u>	<u>Serial Number Code</u>
<u>Power Factor Amount</u>	<u>Model Number Code</u>	<u>Electrical Generator Type Code</u>
<u>Engine Horsepower Code</u>	<u>Engine Serial Number Code</u>	<u>Engine Model Name</u>
<u>Manufacturer Name</u>	<u>Cooling Type Code</u>	

PERFORMANCE:

<u>Capacity Unit Measure Code</u>	<u>Disposition Code</u>	<u>Fuel Type Code</u>
<u>Generator Complex Power Rate</u>	<u>Generator Hertz Rating Code</u>	<u>Generator Number of Phases Quantity</u>
<u>Generator Real Power Rate</u>	<u>Narrative Text</u>	<u>Oil Capacity Volume</u>
<u>Phase Letter Code</u>		

OPERATION/MAINTENANCE:

<u>Automatic Transfer Switch Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical ground point**

OBJECT TYPE: **Point**

DEFINITION: **The location where the electrical configuration is grounded.**

FEATURE ATTRIBUTES FOR: Electrical ground point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical junction point**

OBJECT TYPE: **Point**

DEFINITION: **A box or small vault (usually concrete, brick, or metal) typically located below grade with above grade access in which cables intersect, connect, or pass through.**

FEATURE ATTRIBUTES FOR: Electrical junction point

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Electrical Junction Type Code</u>	<u>Rim Dimension</u>	<u>Cable Quantity</u>
<u>Manhole Diameter Dimension</u>	<u>Material Composition Code</u>	<u>Manhole Floor Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Drain Type Code</u>	<u>Diameter Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Electrical Junction Use Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical marker point**

OBJECT TYPE: **Point**

DEFINITION: **A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc., identifying the location of the electrical equipment.**

FEATURE ATTRIBUTES FOR: Electrical marker point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical meter point**

OBJECT TYPE: **Point**

DEFINITION: **A device installed in a line for measuring the electrical power supplied to a facility or through a section of line.**

FEATURE ATTRIBUTES FOR: Electrical meter point

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Meter Voltage Code</u>	<u>Serial Number Code</u>	<u>Constant Amount</u>
<u>Model Number Code</u>	<u>Electric Meter Type Code</u>	<u>Meter Hertz Rating Code</u>
<u>Complex Power Capacity Rate</u>	<u>Amp Rate</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Electrical Meter Use Code</u>	<u>Meter Number of Phases Quantity</u>
<u>Meter Real Power Rate</u>	<u>Narrative Text</u>	<u>Phase Letter Code</u>

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical motor point**

OBJECT TYPE: **Point**

DEFINITION: **A machine that converts electrical energy into mechanical energy.**

FEATURE ATTRIBUTES FOR: Electrical motor point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Permit Number Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Winding Configuration Type Code</u>	<u>Motor Voltage Code</u>	<u>Serial Number Code</u>
<u>Power Factor Amount</u>	<u>Electrical Motor Type Code</u>	<u>Model Number Code</u>
<u>Insulation Classification Code</u>	<u>Enclosure Type Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Horsepower Rate</u>	<u>Motor Hertz Rating Code</u>
<u>Motor Number of Phases Quantity</u>	<u>Narrative Text</u>	<u>Phase Letter Code</u>

OPERATION/MAINTENANCE:

<u>Startup Configuration Type Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical pedestal point**

OBJECT TYPE: **Point**

DEFINITION: **An above ground enclosure which provides access to underground cables.**

FEATURE ATTRIBUTES FOR: Electrical pedestal point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Serial Number Code</u>	<u>Model Number Code</u>
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PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical regulator point**

OBJECT TYPE: **Point**

DEFINITION: **An electrical device that maintains its output voltage at a certain level even though its input voltage varies in a certain range over time.**

FEATURE ATTRIBUTES FOR: Electrical regulator point

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Weight Unit Measure Code</u>	<u>Serial Number Code</u>	<u>Secondary Voltage Code</u>
<u>Weight</u>	<u>Regulatory Type Code</u>	<u>Number of Taps Quantity</u>
<u>Model Number Code</u>	<u>Pump Station Type Code</u>	<u>Fuse Type Code</u>
<u>Fuse Rate Quantity</u>	<u>Manufacture Date</u>	<u>Cooling Type Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Electrical Regulator Use Code</u>	<u>Narrative Text</u>
<u>Number of Phases Quantity</u>	<u>Oil Capacity Volume</u>	<u>Percentage Tapped Amount</u>
<u>Phase Letter Code</u>	<u>Primary Voltage Code</u>	<u>Rate Capacity Unit Measure Code</u>
<u>Regulator Complex Power Rate</u>		

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical riser point**

OBJECT TYPE: **Point**

DEFINITION: **The location where underground cable transitions to overhead.**

FEATURE ATTRIBUTES FOR: Electrical riser point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>General Pole & Tower Location Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

Riser Material Type Code

PERFORMANCE:

Narrative Text Narrative Text

OPERATION/MAINTENANCE:

Installation Date User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical splice point**

OBJECT TYPE: **Point**

DEFINITION: **The connection of two separate cables at their ends or the tapping of a conductor along the path of another conductor.**

FEATURE ATTRIBUTES FOR: Electrical splice point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical substation site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **A facility in an electrical system where the voltage is reduced from transmission levels to distribution levels.**

FEATURE ATTRIBUTES FOR: Electrical substation site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>Station Area</u>	<u>Electrical Substation Type Code</u>	<u>Number of Transformers Quantity</u>
<u>Number of Spares Quantity</u>	<u>Circuit Number Amount</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Maximum Continuous Power Rate</u>	<u>Narrative Text</u>
<u>Normal Continuous Power Capacity Rate</u>	<u>Rate Capacity Unit Measure Code</u>	<u>Substation Voltage Input Code</u>
<u>Substation Voltage Output Code</u>		

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical switch point**

OBJECT TYPE: **Point**

DEFINITION: **A device which closes and opens (connects and disconnects) an electrical circuit.**

FEATURE ATTRIBUTES FOR: Electrical switch point

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Electrical Switching Cubicle Identifier</u>	<u>Facility Identifier</u>
<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Weight Unit Measure Code</u>	<u>Switch Voltage Code</u>	<u>Weight</u>
<u>Electrical Switch Type Code</u>	<u>Electrical Switch Rate</u>	<u>Switch Dimension</u>
<u>Serial Number Code</u>	<u>Number of Switches Quantity</u>	<u>Model Number Code</u>
<u>Pump Installation Type Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Phase Letter Code</u>
<u>Switch Number of Phases Quantity</u>		

OPERATION/MAINTENANCE:

<u>Normal Positioning Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Electrical System**

FEATURE TYPE: **Electrical transformer bank point**

OBJECT TYPE: **Point**

DEFINITION: **A location containing one or more transformers.**

FEATURE ATTRIBUTES FOR: Electrical transformer bank point

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Feeder Number Text</u>	<u>Transformers in Second Group Quantity</u>	<u>Phase Number for Group Two Value Code</u>
<u>Number of Transformers in First Group Quantity</u>	<u>Secondary Voltage Code</u>	<u>Number of Transformers Quantity</u>
<u>Mounting Type Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>First Transformer Capacity Volume</u>	<u>Narrative Text</u>
<u>Number 1 Capacity Value Code</u>	<u>Number 2 Capacity Value Code</u>	<u>Phase Number Value Code</u>
<u>Primary Voltage Code</u>	<u>Second Transformer Capacity Volume</u>	<u>Third Transformer Capacity Volume</u>
<u>Total KVA Rate</u>		

OPERATION/MAINTENANCE:

<u>Installation Date</u>	<u>Item Condition Code</u>	<u>Last Inspection Date</u>
<u>User Flag Text</u>		

FEATURE CLASS:**Electrical System**

FEATURE TYPE: **Electrical transformer vault point**

OBJECT TYPE: **Point**

DEFINITION: **An enclosure housing one or more transformers.**

FEATURE ATTRIBUTES FOR: Electrical transformer vault point

DATABASE INTEGRATION:

<u>Electrical Substation Identifier</u>	<u>Facility Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Serial Number Code</u>	<u>Number of Transformers Quantity</u>	<u>Model Number Code</u>
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PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS:**Fuel System**

FEATURE TYPE: **Fuel air eliminator point**

OBJECT TYPE: **Point**

DEFINITION: **A device or structure placed in the fuel distribution system to separate air from petroleum products.**

FEATURE ATTRIBUTES FOR: Fuel air eliminator point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS:**Fuel System**

FEATURE TYPE: **Fuel anode point**

OBJECT TYPE: **Point**

DEFINITION: **A material used for utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.**

FEATURE ATTRIBUTES FOR: Fuel anode point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Weight Unit Measure Code</u>	<u>Material Composition Code</u>	<u>Anode Weight</u>
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PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS:**Fuel System**

FEATURE TYPE: **Fuel anode test station point**

OBJECT TYPE: **Point**

DEFINITION: **A central location where anodes are tested for performance.**

FEATURE ATTRIBUTES FOR: Fuel anode test station point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Wire Type Code</u>	<u>Wire Size Code</u>	<u>Fuel Anode Test Station Type Code</u>
<u>Number of Terminals Quantity</u>	<u>Insulation Type Code</u>	

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel catch basin area**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **An area engineered to contain liquid products around tanks and valves in the event of an accidental spill or seepage.**

FEATURE ATTRIBUTES FOR: Fuel catch basin area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Perimeter Dimension</u>	<u>Material Composition Code</u>	<u>Soil Texture Code</u>
<u>Soil Family Code</u>	<u>Soil Consistency Code</u>	<u>Soil Erosion Code</u>
<u>Elevation Unit Measure Code</u>	<u>Invert Elevation Average Dimension</u>	<u>Lagoon Area</u>
<u>Dimension Unit Measure Code</u>	<u>Area Size Unit Measure Code</u>	

PERFORMANCE:

<u>Capacity Volume</u>	<u>Disposition Code</u>	<u>Fuel Type Code</u>
<u>Narrative Text</u>	<u>Overflow Dimension</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS:**Fuel System**

FEATURE TYPE: **Fuel filter strainer point**

OBJECT TYPE: **Point**

DEFINITION: **A device through which fuel is passed to remove impurities to the fuel. Usually placed in fuel lines near fill points.**

FEATURE ATTRIBUTES FOR: Fuel filter strainer point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS:**Fuel System**

FEATURE TYPE: **Fuel fitting point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting is an item used to connect, cap, plug or otherwise alter a pipe.**

FEATURE ATTRIBUTES FOR: Fuel fitting point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Fuel Line Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Fuel Fitting Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>	<u>Material Composition Code</u>	<u>Width Dimension</u>
<u>Length Dimension</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

Disposition Code Narrative Text

OPERATION/MAINTENANCE:

Acquired Date User Flag Text

FEATURE CLASS:**Fuel System**

FEATURE TYPE: **Fuel flow direction arrow**

OBJECT TYPE: **Arrow**

DEFINITION: **A flow direction arrow indicates the direction of flow through a line, valve, or component.**

FEATURE ATTRIBUTES FOR: Fuel flow direction arrow

DATABASE INTEGRATION:

PHYSICAL PROPERTIES:

PERFORMANCE:

OPERATION/MAINTENANCE:

FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel hydrant point**

OBJECT TYPE: **Point**

DEFINITION: **Location where fuel is control discharged to users.**

FEATURE ATTRIBUTES FOR: Fuel hydrant point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Fuel Line Identifier</u>	<u>Fuel Valve Identifier</u>
<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Outlet 3 Diameter Dimension</u>	<u>Outlet 2 Diameter Dimension</u>
<u>Outlet 1 Diameter Dimension</u>	<u>Model Number Code</u>	<u>Hydrant Type Code</u>
<u>Hydrant Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Diameter Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Measure Pressure Rate</u>	<u>Narrative Text</u>
<u>Pressure Unit Measure Code</u>	<u>Static Pressure Head Rate</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel junction point**

OBJECT TYPE: **Point**

DEFINITION: **A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.**

FEATURE ATTRIBUTES FOR: Fuel junction point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Fuel Junction Type Code</u>	<u>Rim Dimension</u>	<u>Number of Valves Quantity</u>
<u>Manhole Number of Pipes Quantity</u>	<u>Model Number Code</u>	<u>Width Dimension</u>
<u>Length Dimension</u>	<u>Manhole Diameter Dimension</u>	<u>Material Composition Code</u>
<u>Invert Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Drain Type Code</u>
<u>Dimension Unit Measure Code</u>	<u>Manhole Air Relief Valve Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Fuel Junction Use Code</u>	<u>Junction Status Code</u>
<u>Narrative Text</u>		

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel line**

OBJECT TYPE: **String/Chain**

DEFINITION: **A pipe used to carry a substance from location to location (main line, service line, vent line, etc).**

FEATURE ATTRIBUTES FOR: Fuel line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Fuel Pump Booster Station Identifier</u>	<u>Fuel System Source Identifier</u>
<u>Fuel Tank Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Line Location Type Code</u>	<u>Fuel Line Type Code</u>	<u>Slope Measure Unit Code</u>
<u>Bottom Slope Percent</u>	<u>Pipe Diameter Measure Code</u>	<u>Length Dimension</u>
<u>Model Number Code</u>	<u>Material Composition Code</u>	<u>Invert Elevation Node 2 Dimension</u>
<u>Invert Elevation Node 1 Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Pipe Cathodic Protection Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Fuel Line Use Code</u>	<u>Fuel Type Code</u>
<u>Maximum Pressure Rate</u>	<u>Narrative Text</u>	<u>Normal Pressure Rate</u>
<u>Pressure Unit Measure Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel marker point**

OBJECT TYPE: **Point**

DEFINITION: **A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.**

FEATURE ATTRIBUTES FOR: Fuel marker point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>General Markers Type Code</u>	<u>Soil Consistency Code</u>	<u>Sign Width Dimension</u>
<u>Sign Text</u>	<u>Sign Material Composition Code</u>	<u>Sign Height Dimension</u>
<u>Pole Material Code</u>	<u>Pole Height Dimension</u>	<u>Pole Depth Dimension</u>
<u>Model Number Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rock Condition Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel meter point**

OBJECT TYPE: **Point**

DEFINITION: **A device installed in a line for measuring the quantity and or rate of fuel to a facility or through a section of line.**

FEATURE ATTRIBUTES FOR: Fuel meter point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Fuel Junction Identifier</u>	<u>Fuel Line Identifier</u>
<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Fuel Meter Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>	<u>Meter Dimension</u>	<u>Pump Station Type Code</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Customer Name</u>	<u>Service Code</u>
<u>User Flag Text</u>		

FEATURE CLASS:**Fuel System**

FEATURE TYPE: **Fuel oil water separator point**

OBJECT TYPE: **Point**

DEFINITION: **A filtering device placed in the fuel stream specifically to remove oil and water from the fuel.**

FEATURE ATTRIBUTES FOR: Fuel oil water separator point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>Fuel Pump Booster Station Identifier</u>
<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>	<u>Permit Number Identifier</u>
<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Fuel Oil & Water Separator Type Code</u>	<u>Oil & Water Separator Code</u>	<u>Grit Chamber Type Code</u>
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PERFORMANCE:

<u>Contents Descriptive Text</u>	<u>Disposal Description Text</u>	<u>Disposition Code</u>
<u>Flow Capacity Volume</u>	<u>Flow Unit Measure Code</u>	<u>Narrative Text</u>
<u>Oil Capacity Volume</u>	<u>Optimum Operating Temperature</u>	<u>Process Type Name</u>
<u>Rate Capacity Unit Measure Code</u>	<u>Separator Volume</u>	<u>Temperature Unit Measure Code</u>
<u>Volume Unit Measure Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Permit Expiration Date</u>	<u>User Flag Text</u>
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FEATURE CLASS:**Fuel System**

FEATURE TYPE: **Fuel pump booster station point**

OBJECT TYPE: **Point**

DEFINITION: **A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.**

FEATURE ATTRIBUTES FOR: Fuel pump booster station point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Station Width Dimension</u>	<u>Fuel Pump Booster Station Type Code</u>	<u>Station Length Dimension</u>
<u>Centerline Dimension</u>	<u>Nodal Elevation Dimension</u>	<u>Number of Pumps Quantity</u>
<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	<u>Booster Design Discriminator</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Fuel Source Code</u>	<u>Narrative Text</u>
<u>Output Capacity Volume</u>	<u>Rate Capacity Unit Measure Code</u>	<u>Structure Condition Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Capacity Alarm Level Volume</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel pump point**

OBJECT TYPE: **Point**

DEFINITION: **A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.**

FEATURE ATTRIBUTES FOR: Fuel pump point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Fuel Pump Booster Station Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Pump Type Code</u>	<u>Serial Number Code</u>	<u>Centerline Dimension</u>
<u>Model Number Code</u>	<u>Elevation Unit Measure Code</u>	<u>Cooling Method Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>	<u>Fuel Pump Use Code</u>
<u>Horsepower Rate</u>	<u>Measured Outflow Volume</u>	<u>Narrative Text</u>
<u>Pump Capacity Rate</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Priming Method Code</u>	<u>Priming Requirement Indicator Code</u>
<u>User Flag Text</u>		

FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel rectifier point**

OBJECT TYPE: **Point**

DEFINITION: **A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the distribution system.**

FEATURE ATTRIBUTES FOR: Fuel rectifier point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Internal Meter Code</u>	<u>Enclosure Type Code</u>	<u>Cooling Method Code</u>
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PERFORMANCE:

<u>Current Output Amount</u>	<u>Current Unit Measure Code</u>	<u>Input Voltage Code</u>
<u>Narrative Text</u>	<u>Number of Phases Quantity</u>	<u>Phase Letter Code</u>
<u>Voltage Output Code</u>		

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel regulator reducer point**

OBJECT TYPE: **Point**

DEFINITION: **A pressure regulator automatically reduces the pressure on the downstream side of the valve to a preset magnitude.**

FEATURE ATTRIBUTES FOR: Fuel regulator reducer point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Fuel Junction Identifier</u>	<u>Fuel Pump Booster Station Identifier</u>
<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>	<u>Pipe Inlet Identifier</u>
<u>Pipe Outflow Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Fuel Regulator Reducer Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Inlet Pressure Rate</u>	<u>Maximum Outlet Design Pressure Rate</u>
<u>Narrative Text</u>	<u>Pressure Unit Measure Code</u>	<u>Required Maximum Outlet Pressure Rate</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel source point**

OBJECT TYPE: **Point**

DEFINITION: **The point from which the utility is supplied a product for processing and distribution.**

FEATURE ATTRIBUTES FOR: Fuel source point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

PERFORMANCE:

<u>Disposition Code</u>	<u>Fuel System Source Type Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel tank site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.**

FEATURE ATTRIBUTES FOR: Fuel tank site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Permit Number Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Rim Dimension</u>	<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Elevation Unit Measure Code</u>	<u>Head Units Unit Measure Code</u>	<u>Invert Elevation Dimension</u>
<u>Interior Tank Area</u>	<u>Model Number Code</u>	<u>Perimeter Unit Measure Code</u>
<u>Serial Number Code</u>	<u>Tank Diameter Dimension</u>	<u>Length Dimension</u>
<u>Tank Type Code</u>	<u>Tank Width Dimension</u>	<u>Perimeter Dimension</u>
<u>Material Composition Code</u>		

PERFORMANCE:

<u>Capacity Volume</u>	<u>Disposition Code</u>	<u>Fuel Tank Use Code</u>
<u>Fuel Type Code</u>	<u>Narrative Text</u>	<u>Normal Operating Head Dimension</u>
<u>Normal Pressure Rate</u>	<u>Overflow Dimension</u>	<u>Pressure Unit Measure Code</u>
<u>Rate Capacity Unit Measure Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Altitude Valve Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Fuel System**

FEATURE TYPE: **Fuel valve point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting or device used for shutting or throttling flow through a line.**

FEATURE ATTRIBUTES FOR: Fuel valve point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Fuel Junction Identifier</u>	<u>Fuel Line Identifier</u>
<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Diameter Code</u>	<u>Valve Dimension</u>
<u>Fuel Valve Use Code</u>	<u>Elevation Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **General Utility Features**

FEATURE TYPE: **Culvert centerline**

OBJECT TYPE: **String/Chain**

DEFINITION: **A concrete ditch with a concrete cover used to house piping for various utilities systems.**

FEATURE ATTRIBUTES FOR: Culvert centerline

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **General Utility Features**

FEATURE TYPE: **Tunnel centerline**

OBJECT TYPE: **String/Chain**

DEFINITION: **An opening which goes through an area which holds piping for various utilities systems and is inaccessible.**

FEATURE ATTRIBUTES FOR: Tunnel centerline

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **General Utility Features**

FEATURE TYPE: **Utility area**

OBJECT TYPE: **G/GT Polygon**

DEFINITION: **An area of utility company responsibility or an area where special construction precautions are required to prevent damage to underground utility services.**

FEATURE ATTRIBUTES FOR: Utility area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>		

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>General Utilities Area</u>		

PERFORMANCE:

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **General Utility Features**

FEATURE TYPE: **Utility pole guy point**

OBJECT TYPE: **Point**

DEFINITION: **A support configuration, which generally includes connecting hardware, cables, and anchor components, used to stabilize structures (poles, towers, etc.). Down guys typically connect to the structures at key stress points and extend to an anchor at the ground.**

FEATURE ATTRIBUTES FOR: Utility pole guy point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>General Pole & Tower Location Identifier</u>	<u>Graphic Feature Link</u>
<u>Guy Type Code</u>	<u>Metadata Identifier</u>	<u>To X Coordinate</u>
<u>To Y Coordinate</u>	<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Tensile Force Unit Measure Code</u>	<u>Guy Design Discriminator</u>	<u>Cable Diameter Unit Measure Code</u>
<u>Cable Type Code</u>	<u>Cable Tensile Force</u>	<u>Cable Sheath Type Code</u>
<u>Cable Material Code</u>	<u>Cable Length Dimension</u>	<u>Cable Diameter Dimension</u>
<u>Anchor Type Text</u>	<u>Anchor Attachment Type Text</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **General Utility Features**

FEATURE TYPE: **Utility pole tower point**

OBJECT TYPE: **Point**

DEFINITION: **A structure used to elevate wires, cables, or other lines above the ground surface.**

FEATURE ATTRIBUTES FOR: Utility pole tower point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Classification Code</u>	<u>General Pole & Tower Location Code</u>	<u>Treatment Type Code</u>
<u>Pole Height Dimension</u>	<u>Pole Length Dimension</u>	<u>Material Composition Code</u>
<u>Grounded Code</u>	<u>Dimension Unit Measure Code</u>	<u>Pole & Tower Design Discriminator</u>
<u>Pole & Tower Condition Code</u>	<u>Capped Code</u>	

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Treatment Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool anchor point**

OBJECT TYPE: **Point**

DEFINITION: **A structure, typically concrete, used to either guide the expansion of pipes or used to fix the movement of some part of the expansion section.**

FEATURE ATTRIBUTES FOR: Heat cool anchor point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Heating and Cooling Pipe Identifier</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

Anchor Type Discriminator

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool anode point**

OBJECT TYPE: **Point**

DEFINITION: **A device used in utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.**

FEATURE ATTRIBUTES FOR: Heat cool anode point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Weight Unit Measure Code</u>	<u>Material Composition Code</u>	<u>Anode Weight</u>
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PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool anode test station point**

OBJECT TYPE: **Point**

DEFINITION: **A central location where anodes are tested for performance.**

FEATURE ATTRIBUTES FOR: Heat cool anode test station point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Wire Type Code</u>	<u>Wire Size Code</u>	<u>Heating and Cooling Anode Test Station Type Code</u>
<u>Number of Terminals Quantity</u>	<u>Insulation Type Code</u>	

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool fitting point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting is an item used to connect, cap, plug or otherwise attach to a pipe.**

FEATURE ATTRIBUTES FOR: Heat cool fitting point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Heating and Cooling Pipe Identifier</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Heating and Cooling Fitting Location Type Code</u>	<u>Size Unit Measure Code</u>	<u>Pipe Diameter Measure Code</u>
<u>Serial Number Code</u>	<u>Model Number Code</u>	<u>Material Composition Code</u>
<u>Ground Elevation Dimension</u>	<u>Fitting Width Dimension</u>	<u>Fitting Length Dimension</u>
<u>Fitting Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Diameter Unit Measure Code</u>	<u>Interior Diameter Dimension</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool flow direction arrow**

OBJECT TYPE: Arrow

DEFINITION: **A flow direction arrow indicates the direction of flow through a line, valve, or component.**

FEATURE ATTRIBUTES FOR: Heat cool flow direction arrow

DATABASE INTEGRATION:

PHYSICAL PROPERTIES:

PERFORMANCE:

OPERATION/MAINTENANCE:

FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool junction point**

OBJECT TYPE: Point

DEFINITION: **A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.**

FEATURE ATTRIBUTES FOR: Heat cool junction point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Heating and Cooling Junction Type Code</u>	<u>Rim Dimension</u>	<u>Number of Valves Quantity</u>
<u>Number of Pipes Quantity</u>	<u>Model Number Code</u>	<u>Exterior Width Dimension</u>
<u>Length Dimension</u>	<u>Manhole Diameter Dimension</u>	<u>Material Composition Code</u>
<u>Invert Elevation Dimension</u>	<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Drain Type Code</u>	<u>Dimension Unit Measure Code</u>	<u>Manhole Air Relief Valve Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Heating and Cooling Junction Use Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool line**

OBJECT TYPE: **String/Chain**

DEFINITION: **A pipe used to carry a substance from location to location (main line, service line, vent line, etc).**

FEATURE ATTRIBUTES FOR: Heat cool line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Heating and Cooling Plant Identifier</u>
<u>Metadata Identifier</u>	<u>To X Coordinate</u>	<u>To Y Coordinate</u>
<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Material Composition Code</u>	<u>Dimension Unit Measure Code</u>	<u>Elevation Unit Measure Code</u>
<u>Expansion Loop Code</u>	<u>Ground Elevation 1 Dimension</u>	<u>Ground Elevation 2 Dimension</u>
<u>Pipe Cathodic Protection Code</u>	<u>Invert Elevation Node 2 Dimension</u>	<u>Heating and Cooling Pipe Location Type Code</u>
<u>Model Number Code</u>	<u>Length Dimension</u>	<u>Pipe Diameter Measure Code</u>
<u>Bottom Slope Percent</u>	<u>Slope Measure Unit Code</u>	<u>Marker Tape Code</u>
<u>Invert Elevation Node 1 Dimension</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Heating and Cooling Pipe Location Use Code</u>	<u>Maximum Pressure Rate</u>
<u>Maximum Temperature</u>	<u>Narrative Text</u>	<u>Normal Pressure Rate</u>
<u>Normal Temperature</u>	<u>Pressure Unit Measure Code</u>	<u>Temperature Unit Measure Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool marker point**

OBJECT TYPE: **Point**

DEFINITION: **A sign, concrete monument, etc., installed either directly above or immediately adjacent equipment marking its location.**

FEATURE ATTRIBUTES FOR: Heat cool marker point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>General Markers Type Code</u>	<u>Soil Consistency Code</u>	<u>Sign Width Dimension</u>
<u>Sign Text</u>	<u>Sign Material Composition Code</u>	<u>Sign Height Dimension</u>
<u>Pole Material Code</u>	<u>Pole Height Dimension</u>	<u>Pole Depth Dimension</u>
<u>Model Number Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rock Condition Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: Heating & Cooling System

FEATURE TYPE: **Heat cool meter point**

OBJECT TYPE: **Point**

DEFINITION: **A device installed in a line for measuring the quantity and or rate of water to a facility or through a section of line.**

FEATURE ATTRIBUTES FOR: Heat cool meter point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Heating and Cooling Junction Identifier</u>
<u>Heating and Cooling Pipe Identifier</u>	<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Heating and Cooling Meter Location Type Code</u>	<u>Service Line Code</u>	<u>Size Unit Measure Code</u>
<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>	<u>Model Number Code</u>
<u>Meter Dimension</u>	<u>Pump Station Type Code</u>	<u>Ground Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Customer Name</u>	<u>User Flag Text</u>
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FEATURE CLASS: Heating & Cooling System

FEATURE TYPE: Heat cool plant area

OBJECT TYPE: G/GT Polygon

DEFINITION: A building or structure containing boilers, furnaces, chillers, pumps and appurtenant equipment to produce the water temperature/pressure combinations which are distributed to other buildings and facilities.

FEATURE ATTRIBUTES FOR: Heat cool plant area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Heating and Cooling Plant Type Code</u>	<u>Plant Width Dimension</u>	<u>Length Dimension</u>
<u>Plant Dimension</u>	<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>
<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Heating Capacity Unit Measure Code</u>	<u>Area Size Unit Measure Code</u>	<u>Plant Area</u>

PERFORMANCE:

<u>Cooling Capacity Amount</u>	<u>Cooling Capacity Unit Measure Code</u>	<u>Disposition Code</u>
<u>Heating Capacity Amount</u>	<u>Narrative Text</u>	<u>Nominal Cooling Pressure Rate</u>
<u>Nominal Cooling Water Temperature</u>	<u>Nominal Heating Pressure Rate</u>	<u>Nominal Hot Water Temperature</u>
<u>Pressure Unit Measure Code</u>	<u>Product Type Code</u>	<u>Temperature Unit Measure Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: Heating & Cooling System

FEATURE TYPE: Heat cool pump point

OBJECT TYPE: Point

DEFINITION: A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.

FEATURE ATTRIBUTES FOR: Heat cool pump point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Pump Type Code</u>	<u>Total Dynamic Head Unit Measure Code</u>	<u>Total Dynamic Head Dimension</u>
<u>Serial Number Code</u>	<u>Centerline Dimension</u>	<u>Model Number Code</u>
<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Cooling Method Code</u>

PERFORMANCE:

<u>Actual Pump Capacity Volume</u>	<u>Disposition Code</u>	<u>Heating and Cooling Pump Use Code</u>
<u>Narrative Text</u>	<u>Power Required Code</u>	<u>Pump Capacity Rate</u>
<u>Rate Capacity Unit Measure Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Priming Method Code</u>	<u>Priming Requirement Indicator Code</u>
<u>User Flag Text</u>		

FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool rectifier point**

OBJECT TYPE: **Point**

DEFINITION: **A device that changes alternating current to direct current for an impressed current cathodic protection system.**

FEATURE ATTRIBUTES FOR: Heat cool rectifier point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Internal Meter Code</u>	<u>Enclosure Type Code</u>	<u>Cooling Method Code</u>
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PERFORMANCE:

<u>Current Output Amount</u>	<u>Current Unit Measure Code</u>	<u>Narrative Text</u>
<u>Number of Phases Quantity</u>	<u>Phase Letter Code</u>	<u>Voltage Input Code</u>
<u>Voltage Output Code</u>		

OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool regulator point**

OBJECT TYPE: **Point**

DEFINITION: **A pressure regulator automatically reduces the pressure on the downstream side of the valve to a preset magnitude.**

FEATURE ATTRIBUTES FOR: Heat cool regulator point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Heating and Cooling Junction Identifier</u>
<u>Metadata Identifier</u>	<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Heating and Cooling Regulator Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Elevation Value Dimension</u>	<u>Model Number Code</u>	<u>Ground Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Inlet Pressure Rate</u>	<u>Narrative Text</u>
<u>Outlet Maximum Pressure Rate</u>	<u>Pressure Unit Measure Code</u>	<u>Required Maximum Pressure Rate</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Heating & Cooling System**

FEATURE TYPE: **Heat cool valve point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting or device used for shutting or throttling flow through a line.**

FEATURE ATTRIBUTES FOR: Heat cool valve point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Heating and Cooling Junction Identifier</u>
<u>Heating and Cooling Pipe Identifier</u>	<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Size Dimension</u>	<u>Valve Dimension</u>
<u>Size Unit Measure Code</u>	<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Heating and Cooling Valve Use Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste anode point**

OBJECT TYPE: **Point**

DEFINITION: **A material used for utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.**

FEATURE ATTRIBUTES FOR: Industrial waste anode point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Weight Unit Measure Code</u>	<u>Material Composition Code</u>	<u>Anode Weight</u>
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PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste anode test station point**

OBJECT TYPE: **Point**

DEFINITION: **A central location where anodes are tested for performance.**

FEATURE ATTRIBUTES FOR: Industrial waste anode test station point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Wire Type Code</u>	<u>Wire Size Code</u>	<u>Water Anode Test Station Type Code</u>
<u>Number of Terminal's Quantity</u>	<u>Insulation Type Code</u>	

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste discharge point**

OBJECT TYPE: **Point**

DEFINITION: **Any location where industrial waste water pipes directly discharge effluent.**

FEATURE ATTRIBUTES FOR: Industrial waste discharge point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Line Identifier</u>
<u>Industrial Waste Tank Identifier</u>	<u>Industrial Waste Treatment Plant Identifier</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

Industrial Waste Water Discharge Code

PERFORMANCE:

Disposition Code Narrative Text

OPERATION/MAINTENANCE:

Acquired Date User Flag Text

FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste fitting point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting is an item used to connect, cap, plug or otherwise alter a pipe.**

FEATURE ATTRIBUTES FOR: Industrial waste fitting point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Line Identifier</u>
<u>Metadata Identifier</u>	<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Industrial Waste Fitting Location Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>	<u>Material Composition Code</u>	<u>Fitting Width Dimension</u>
<u>Fitting Length Dimension</u>	<u>Fitting Depth Dimension</u>	<u>Dimension Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste flow direction arrow** OBJECT TYPE: **Arrow**

DEFINITION: **A flow direction arrow indicates the direction of flow through a line, valve, or component.**

FEATURE ATTRIBUTES FOR: Industrial waste flow direction arrow

DATABASE INTEGRATION:

PHYSICAL PROPERTIES:

PERFORMANCE:

OPERATION/MAINTENANCE:

FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste grit chamber point** OBJECT TYPE: **Point**

DEFINITION: **A chamber designed to remove sand, gravel, or other heavy solids that have subsiding velocities or specific gravities substantially greater than those of the organic solids in the waste water.**

FEATURE ATTRIBUTES FOR: Industrial waste grit chamber point

 DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Treatment Plant Identifier</u>
<u>Metadata Identifier</u>	<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Oil-Water Separator Code</u>	<u>Grit Type Code</u>
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PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Capacity Volume</u>	<u>Flow Unit Measure Code</u>
<u>Grit Chamber Storage Capacity Volume</u>	<u>Narrative Text</u>	<u>Rate Capacity Unit Measure Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste inlet point**

OBJECT TYPE: **Point**

DEFINITION: **The location where water is collected and received into the utility system.**

FEATURE ATTRIBUTES FOR: Industrial waste inlet point

 DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Line Identifier</u>
<u>Metadata Identifier</u>	<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Weir Elevation Dimension</u>	<u>Model Number Code</u>	<u>Invert Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Design Capacity Volume</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>	<u>Inlet Step Domain Discriminator</u>
<u>Narrative Text</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste junction point**

OBJECT TYPE: **Point**

DEFINITION: **A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.**

FEATURE ATTRIBUTES FOR: Industrial waste junction point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Industrial Waste Junction Type Code</u>	<u>Rim Dimension</u>	<u>Reactance Amount</u>
<u>Number of Pipes Quantity</u>	<u>Pit Neutralization Agent Name</u>	<u>Model Number Code</u>
<u>Width Dimension</u>	<u>Length Dimension</u>	<u>Diameter Dimension</u>
<u>Material Composition Code</u>	<u>Liner Type Code</u>	<u>Invert Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Drain Type Code</u>	<u>Dimension Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Industrial Waste Junction Use Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste lagoon area**

OBJECT TYPE: **G/GT Polygon**

DEFINITION: **A shallow man made pool or pond for the purpose of holding industrial waste.**

FEATURE ATTRIBUTES FOR: Industrial waste lagoon area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Treatment Plant Identifier</u>
<u>Industrial Waste Water Discharge Identifier</u>	<u>Laboratory Name Code</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Outlet Control Identifier</u>	<u>Pipe Inlet Identifier</u>
<u>Pipe Outflow Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>	<u>Tributary Utility Subsystem Code</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Number of Pumps Quantity</u>	<u>Aerator Power Rating Amount</u>	<u>Lagoon Area</u>
<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	<u>Elevation Unit Measure Code</u>
<u>Invert Elevation Average Dimension</u>	<u>Laboratory Type Code</u>	<u>Length Dimension</u>
<u>Lagoon Width Dimension</u>	<u>Aerator Indicator Code</u>	<u>Number of Outlet Pipes Quantity</u>
<u>Cross Dikes Code</u>	<u>Perimeter Dimension</u>	<u>Perimeter Unit Measure Code</u>
<u>Lagoon Pipe Outlet Code</u>	<u>Soil Consistency Code</u>	<u>Soil Erosion Code</u>
<u>Soil Family Code</u>	<u>Soil Texture Code</u>	<u>Industrial Waste Lagoon Type Code</u>
<u>Weir Outlets Code</u>	<u>Number of Inlet Pipes Quantity</u>	

PERFORMANCE:

<u>Average Depth Dimension</u>	<u>Horsepower Unit Measure Code</u>	<u>Industrial Waste Lagoon Use Code</u>
<u>Narrative Text</u>	<u>Sanitary Wastewater Use Code</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Analysis Date</u>	<u>Constructed Date</u>
<u>Frequency Unit Measure Code</u>	<u>Managing Office Code</u>	<u>Monitoring Agency Name</u>
<u>Sampling Frequency Rate</u>	<u>Test Type Code</u>	<u>User Flag Text</u>

FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste line**

OBJECT TYPE: **String/Chain**

DEFINITION: **A pipe used to carry a substance from location to location (main line, service line, force main line, etc).**

FEATURE ATTRIBUTES FOR: Industrial waste line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Pumping Station Ejector Identifier</u>
<u>Industrial Waste Tank Identifier</u>	<u>Industrial Waste Treatment Plant Identifier</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Industrial Waste Line Type Code</u>	<u>Slope Measure Unit Code</u>	<u>Bottom Slope Percent</u>
<u>Pipe Diameter Measure Code</u>	<u>Length Dimension</u>	<u>Model Number Code</u>
<u>Material Composition Code</u>	<u>Lined Code</u>	<u>Invert Elevation Node 2 Dimension</u>
<u>Invert Elevation Node 1 Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Drainage Pipe Material Texture Code</u>
<u>Drainage Pattern Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Industrial Waste Line Use Code</u>	<u>Maximum Pressure Rate</u>
<u>Narrative Text</u>	<u>Normal Pressure Rate</u>	<u>Pressure Unit Measure Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: Industrial System

FEATURE TYPE: Industrial waste marker point

OBJECT TYPE: Point

DEFINITION: A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.

FEATURE ATTRIBUTES FOR: Industrial waste marker point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>General Markers Type Code</u>	<u>Soil Consistency Code</u>	<u>Sign Width Dimension</u>
<u>Sign Text</u>	<u>Sign Material Composition Code</u>	<u>Sign Height Dimension</u>
<u>Pole Material Code</u>	<u>Pole Height Dimension</u>	<u>Pole Depth Dimension</u>
<u>Model Number Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rock Condition Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: Industrial System

FEATURE TYPE: Industrial waste meter point

OBJECT TYPE: Point

DEFINITION: A device installed in a line for measuring the quantity and or rate of waste through a section of line.

FEATURE ATTRIBUTES FOR: Industrial waste meter point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Junction Identifier</u>
<u>Industrial Waste Line Identifier</u>	<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Industrial Waste Meter Location Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Width Dimension</u>	<u>Length Dimension</u>	<u>Depth Dimension</u>
<u>Model Number Code</u>	<u>Meter Dimension</u>	<u>Pump Station Type Code</u>
<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Meter Design Discriminator</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste neutralizer point**

OBJECT TYPE: **Point**

DEFINITION: **A receptacle or chamber, which by chemical reactions with reactant materials in the receptacle, makes liquid waste passing through the receptacle chemically neutral.**

FEATURE ATTRIBUTES FOR: Industrial waste neutralizer point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Industrial Waste Neutralizer Type Code</u>	<u>Rim Dimension</u>	<u>Pit Reactantance Amount</u>
<u>Pit Number of Pipes Quantity</u>	<u>Pit Width Dimension</u>	<u>Pit Length Dimension</u>
<u>Pit Diameter Dimension</u>	<u>Pit Neutralization Agent Name</u>	<u>Model Number Code</u>
<u>Material Composition Code</u>	<u>Pit Liner Type Code</u>	<u>Invert Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Drain Type Code</u>	<u>Dimension Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste oil water separator site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **A device or structure placed in the waste stream to separate water from oil products.**

FEATURE ATTRIBUTES FOR: Industrial waste oil water separator site

 DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>Graphic Feature Link</u>
<u>Industrial Waste Pumping Station Ejector Identifier</u>	<u>Industrial Waste Tank Identifier</u>	<u>Industrial Waste Treatment Plant Identifier</u>
<u>Metadata Identifier</u>	<u>Permit Number Identifier</u>	<u>Pipe Inlet Identifier</u>
<u>Pipe Outflow Identifier</u>	<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>Oil & Water Separator Area</u>	<u>Industrial Waste Oil & Water Separator Code</u>	<u>Oil & Water Separator Code</u>
<u>Grit Chamber Type Code</u>		

PERFORMANCE:

<u>Contents Descriptive Text</u>	<u>Disposal Description Text</u>	<u>Disposition Code</u>
<u>Flow Capacity Volume</u>	<u>Flow Unit Measure Code</u>	<u>Narrative Text</u>
<u>Oil Capacity Volume</u>	<u>Optimum Operating Temperature</u>	<u>Process Type Name</u>
<u>Rate Capacity Unit Measure Code</u>	<u>Separator Volume</u>	<u>Temperature Unit Measure Code</u>
<u>Volume Unit Measure Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Permit Expiration Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste pump point**

OBJECT TYPE: **Point**

DEFINITION: **A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.**

FEATURE ATTRIBUTES FOR: Industrial waste pump point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Pumping Station Ejector Identifier</u>
<u>Industrial Waste Treatment Plant Identifier</u>	<u>Metadata Identifier</u>	<u>Pipe Inlet Identifier</u>
<u>Pipe Outflow Identifier</u>	<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Industrial Waste Pump Type Code</u>	<u>Serial Number Code</u>	<u>Centerline Dimension</u>
<u>Model Number Code</u>	<u>Elevation Unit Measure Code</u>	<u>Cooling Method Code</u>

PERFORMANCE:

<u>Actual Pump Capacity Volume</u>	<u>Disposition Code</u>	<u>Horsepower Rate</u>
<u>Industrial Waste Pump Use Code</u>	<u>Narrative Text</u>	<u>Pump Capacity Rate</u>
<u>Rate Capacity Unit Measure Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Priming Method Code</u>	<u>Priming Requirement Indicator Code</u>
<u>User Flag Text</u>		

FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste pump station ejector point** OBJECT TYPE: **Point**

DEFINITION: **A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.**

FEATURE ATTRIBUTES FOR: Industrial waste pump station ejector point

 DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Treatment Plant Identifier</u>
<u>Metadata Identifier</u>	<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Industrial Waste Pumping Station Ejector Type Code</u>	<u>Station Width Dimension</u>	<u>Station Length Dimension</u>
<u>Nodal Elevation Dimension</u>	<u>Number of Pumps Quantity</u>	<u>High Water Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	<u>Pump Design Discriminator</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rate Capacity Unit Measure Code</u>
<u>Structure Condition Code</u>	<u>Wet Well Capacity Volume</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Alarm High Level Dimension</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste rectifier point**

OBJECT TYPE: **Point**

DEFINITION: **A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the distribution system.**

FEATURE ATTRIBUTES FOR: Industrial waste rectifier point

 DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Cooling Method Code</u>	<u>Internal Meter Code</u>	<u>Enclosure Type Code</u>
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PERFORMANCE:

<u>Current Output Amount</u>	<u>Current Unit Measure Code</u>	<u>Narrative Text</u>
<u>Number of Phases Quantity</u>	<u>Phase Letter Code</u>	<u>Voltage Input Code</u>
<u>Voltage Output Code</u>		

OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste storage area**

OBJECT TYPE: **G/GT Polygon**

DEFINITION: **A structure used to contain and hold industrial waste.**

FEATURE ATTRIBUTES FOR: Industrial waste storage area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Facility Number Identifier</u>	<u>Graphic Feature Link</u>
<u>Industrial Waste Treatment Plant Identifier</u>	<u>Industrial Waste Water Discharge Identifier</u>	<u>Laboratory Name Code</u>
<u>Metadata Identifier</u>	<u>Outlet Control Name</u>	<u>Storm Sewer Drainage Basin Identifier</u>
<u>Unique Feature Identifier</u>	<u>Y Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Vault Pipe Outlet Code</u>	<u>Vault Width Dimension</u>	<u>Dimension Unit Measure Code</u>
<u>Invert Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Aerator Indicator Code</u>
<u>Aerator Power Rating Amount</u>	<u>Number of Pumps Quantity</u>	<u>Length Dimension</u>
<u>Number of Pipes Out Quantity</u>	<u>System Y Coordinate</u>	<u>Weir Outlets Code</u>
<u>Laboratory Type Code</u>	<u>Vault Area</u>	<u>Area Size Unit Measure Code</u>
<u>Perimeter Dimension</u>	<u>Perimeter Unit Measure Code</u>	<u>System X Coordinate</u>
<u>Number of Pipes In Quantity</u>		

PERFORMANCE:

<u>Average Depth Dimension</u>	<u>Horsepower Unit Measure Code</u>	<u>Narrative Text</u>
<u>Vault Industrial Wastewater Use Code</u>	<u>Vault Wastewater Use Code</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Analysis Date</u>	<u>Frequency Unit Measure Code</u>
<u>Installation Date</u>	<u>Item Condition Code</u>	<u>Last Inspection Date</u>
<u>Managing Agency Code</u>	<u>Managing Office Code</u>	<u>Sampling Frequency Rate</u>
<u>Test Type Code</u>	<u>User Flag Text</u>	

FEATURE CLASS: Industrial System

FEATURE TYPE: Industrial waste tank point

OBJECT TYPE: Point

DEFINITION: An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.

FEATURE ATTRIBUTES FOR: Industrial waste tank point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Permit Number Identifier</u>	<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Top Dimension</u>	<u>Tank Width Dimension</u>	<u>Length Dimension</u>
<u>Tank Diameter Dimension</u>	<u>Depth Dimension</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>	<u>Material Composition Code</u>	<u>Invert Elevation Dimension</u>
<u>Head Units Unit Measure Code</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Area Size Unit Measure Code</u>	<u>Interior Tank Area</u>	

PERFORMANCE:

<u>Capacity Volume</u>	<u>Discriminator Tank Type Code</u>	<u>Disposition Code</u>
<u>Industrial Waste Tank Use Code</u>	<u>Narrative Text</u>	<u>Normal Operating Head Dimension</u>
<u>Overflow Dimension</u>	<u>Rate Capacity Unit Measure Code</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Altitude Valve Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste treatment plant area**

OBJECT TYPE: **G/GT Polygon**

DEFINITION: **Equipment; or a structure containing equipment, processes, piping, or components; used to treat and remove unwanted constituents.**

FEATURE ATTRIBUTES FOR: Industrial waste treatment plant area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Industrial Waste Treatment Plant Code</u>	<u>Plant Width Dimension</u>	<u>Length Dimension</u>
<u>Plant Dimension</u>	<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>
<u>Number of Pumps Quantity</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Bypass Code</u>	<u>Area Size Unit Measure Code</u>	<u>Plant Area</u>

PERFORMANCE:

<u>Actual Plant Capacity Volume</u>	<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>
<u>Narrative Text</u>	<u>Rated Flow Capacity Rate</u>	<u>Structure Condition Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Industrial System**

FEATURE TYPE: **Industrial waste valve point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting or device used for shutting or throttling flow through a line.**

FEATURE ATTRIBUTES FOR: Industrial waste valve point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Industrial Waste Junction Identifier</u>
<u>Industrial Waste Line Identifier</u>	<u>Industrial Waste Treatment Plant Identifier</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Valve Dimension</u>	<u>Pipe Diameter Measure Code</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Industrial Waste Valve Use Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas anode point**

OBJECT TYPE: **Point**

DEFINITION: **A material used for utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.**

FEATURE ATTRIBUTES FOR: Natural gas anode point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Weight Unit Measure Code</u>	<u>Material Composition Code</u>	<u>Anode Weight</u>
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PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas anode test station point**

OBJECT TYPE: **Point**

DEFINITION: **A central location where anodes are tested for performance.**

FEATURE ATTRIBUTES FOR: Natural gas anode test station point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Wire Type Code</u>	<u>Wire Size Code</u>	<u>Natural Gas Anode Test Station Type Code</u>
<u>Number of Terminals Quantity</u>	<u>Insulation Type Code</u>	

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas fill point**

OBJECT TYPE: **Point**

DEFINITION: **Location where gas is control discharged to users.**

FEATURE ATTRIBUTES FOR: Natural gas fill point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Natural Gas Line Identifier</u>	<u>Natural Gas Valve Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Outlet 3 Diameter Dimension</u>	<u>Outlet 2 Diameter Dimension</u>
<u>Outlet 1 Diameter Dimension</u>	<u>Model Number Code</u>	<u>Hydrant Type Code</u>
<u>Hydrant Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Diameter Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Fuel Gas Source Code</u>	<u>Fuel Type Code</u>
<u>Narrative Text</u>	<u>Pressure Unit Measure Code</u>	<u>Residual Pressure Rate</u>
<u>Static Pressure Head Rate</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas fitting point**

OBJECT TYPE: **Point**

DEFINITION: **Hardware used to cap, plug, or join pieces of pipe.**

FEATURE ATTRIBUTES FOR: Natural gas fitting point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Natural Gas Line Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Natural Gas Fitting Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>	<u>Material Composition Code</u>	<u>Width Dimension</u>
<u>Length Dimension</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas flow direction arrow**

OBJECT TYPE: **Arrow**

DEFINITION: **A flow direction arrow indicates the direction of flow through a line, valve, or component.**

FEATURE ATTRIBUTES FOR: Natural gas flow direction arrow

DATABASE INTEGRATION:

PHYSICAL PROPERTIES:

PERFORMANCE:

OPERATION/MAINTENANCE:

FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas junction point**

OBJECT TYPE: **Point**

DEFINITION: **A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.**

FEATURE ATTRIBUTES FOR: Natural gas junction point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Natural Gas Junction Type Code</u>	<u>Rim Dimension</u>	<u>Number of Valves Quantity</u>
<u>Manhole Number of Pipes Quantity</u>	<u>Model Number Code</u>	<u>Width Dimension</u>
<u>Length Dimension</u>	<u>Manhole Diameter Dimension</u>	<u>Material Composition Code</u>
<u>Invert Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Drain Type Code</u>
<u>Dimension Unit Measure Code</u>	<u>Manhole Air Relief Valve Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Natural Gas Junction Use Code</u>
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OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas light point**

OBJECT TYPE: **Point**

DEFINITION: **A point graphic representing the location of a gas light fixture. A gas light fixture utilizes gas as it's energy source and contains a flame used for illumination of an area.**

FEATURE ATTRIBUTES FOR: Natural gas light point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>General Pole & Tower Location Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Natural Gas Pumping Station Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Model Number Code</u>	<u>Height Dimension</u>	<u>Natural Gas Light Type Code</u>
<u>Fixture Height Dimension</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Fixture Use Code</u>	<u>Fuel Type Code</u>
<u>Narrative Text</u>	<u>Rate Unit Measure Code</u>	<u>Use Rate</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: Natural Gas System

FEATURE TYPE: Natural gas line

OBJECT TYPE: String/Chain

DEFINITION: A pipe used to carry a substance from location to location (main line, service line, vent line, etc).

FEATURE ATTRIBUTES FOR: Natural gas line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Natural Gas Pumping Station Identifier</u>	<u>Natural Gas Source Identifier</u>	<u>Natural Gas Tank Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Line Location Type Code</u>	<u>Natural Gas Line Type Code</u>	<u>Pipe Diameter Measure Code</u>
<u>Length Dimension</u>	<u>Model Number Code</u>	<u>Material Composition Code</u>
<u>Invert Elevation Node 2 Dimension</u>	<u>Invert Elevation Node 1 Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Dimension Unit Measure Code</u>	<u>Pipe Cathodic Protection Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Fuel Gas Source Code</u>	<u>Fuel Type Code</u>
<u>Maximum Pressure Rate</u>	<u>Narrative Text</u>	<u>Natural Gas Line Use Code</u>
<u>Normal Pressure Rate</u>	<u>Pressure Unit Measure Code</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas marker point**

OBJECT TYPE: **Point**

DEFINITION: **A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.**

FEATURE ATTRIBUTES FOR: Natural gas marker point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>General Markers Type Code</u>	<u>Soil Consistency Code</u>	<u>Sign Width Dimension</u>
<u>Sign Text</u>	<u>Sign Material Composition Code</u>	<u>Sign Height Dimension</u>
<u>Pole Material Code</u>	<u>Pole Height Dimension</u>	<u>Pole Depth Dimension</u>
<u>Model Number Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rock Condition Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas meter point**

OBJECT TYPE: **Point**

DEFINITION: **A device installed in a line for measuring the quantity and or rate of gas to a facility or through a section of line.**

FEATURE ATTRIBUTES FOR: Natural gas meter point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Natural Gas Junction Identifier</u>	<u>Natural Gas Line Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Natural Gas Meter Type Code</u>	<u>Service Line Code</u>	<u>Pipe Diameter Measure Code</u>
<u>Serial Number Code</u>	<u>Model Number Code</u>	<u>Meter Dimension</u>
<u>Pump Station Type Code</u>	<u>Elevation Unit Measure Code</u>	<u>Diameter Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Fuel Gas Source Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Customer Name</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas pump point**

OBJECT TYPE: **Point**

DEFINITION: **A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.**

FEATURE ATTRIBUTES FOR: Natural gas pump point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Natural Gas Pumping Station Identifier</u>	<u>Natural Gas Source Identifier</u>	<u>Pipe Inlet Identifier</u>
<u>Pipe Outflow Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Natural Gas Pump Type Code</u>	<u>Serial Number Code</u>	<u>Centerline Dimension</u>
<u>Model Number Code</u>	<u>Elevation Unit Measure Code</u>	<u>Cooling Method Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Rate</u>	<u>Flow Unit Measure Code</u>
<u>Horsepower Rate</u>	<u>Measured Outflow Volume</u>	<u>Narrative Text</u>
<u>Natural Gas Pump Use Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Priming Method Code</u>	<u>Priming Requirement Indicator Code</u>
<u>User Flag Text</u>		

FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas pump station site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.**

FEATURE ATTRIBUTES FOR: Natural gas pump station site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>Station Area</u>	<u>Station Width Dimension</u>	<u>Natural Gas Pumping Station Type Code</u>
<u>Station Length Dimension</u>	<u>Nodal Elevation Dimension</u>	<u>Number of Pumps Quantity</u>
<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Fuel Gas Source Code</u>	<u>Narrative Text</u>
<u>Normal Inline Pressure Rate</u>	<u>Outlet Gas Line Maximum Pressure Rate</u>	<u>Output Capacity Volume</u>
<u>Pressure Unit Measure Code</u>	<u>Rate Capacity Unit Measure Code</u>	<u>Structure Condition Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Capacity Alarm Level Volume</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas rectifier point**

OBJECT TYPE: **Point**

DEFINITION: **A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the distribution system.**

FEATURE ATTRIBUTES FOR: Natural gas rectifier point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Internal Meter Code</u>	<u>Enclosure Type Code</u>	<u>Cooling Method Code</u>
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PERFORMANCE:

<u>Current Output Amount</u>	<u>Current Unit Measure Code</u>	<u>Input Voltage Code</u>
<u>Narrative Text</u>	<u>Number of Phases Quantity</u>	<u>Phase Letter Code</u>
<u>Voltage Output Code</u>		

OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas regulator reducer point**

OBJECT TYPE: **Point**

DEFINITION: **A pressure regulator automatically reduces the pressure on the downstream side of the valve to a preset magnitude.**

FEATURE ATTRIBUTES FOR: Natural gas regulator reducer point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Natural Gas Junction Identifier</u>	<u>Natural Gas Pumping Station Identifier</u>	<u>Pipe Inlet Identifier</u>
<u>Pipe Outflow Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Natural Gas Regulator Reducer Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Inlet Gas Line Pressure Rate</u>	<u>Narrative Text</u>
<u>Outlet Gas Line Maximum Operating Pressure Rate</u>	<u>Pressure Unit Measure Code</u>	<u>Required Maximum Outlet Pressure Rate</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas source point**

OBJECT TYPE: **Point**

DEFINITION: **The point from which the utility is supplied a product for processing and distribution.**

FEATURE ATTRIBUTES FOR: Natural gas source point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Natural Gas Source Type Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas tank point**

OBJECT TYPE: **Point**

DEFINITION: **An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.**

FEATURE ATTRIBUTES FOR: Natural gas tank point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Permit Number Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Top Dimension</u>	<u>Tank Width Dimension</u>	<u>Tank Type Code</u>
<u>Length Dimension</u>	<u>Tank Diameter Dimension</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>	<u>Material Composition Code</u>	<u>Invert Elevation Dimension</u>
<u>Head Units Unit Measure Code</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Area Size Unit Measure Code</u>	<u>Interior Tank Area</u>	

PERFORMANCE:

<u>Capacity Unit Measure Code</u>	<u>Capacity Volume</u>	<u>Disposition Code</u>
<u>Narrative Text</u>	<u>Natural Gas Tank Use Code</u>	<u>Normal Operating Head Dimension</u>
<u>Normal Pressure Rate</u>	<u>Overflow Dimension</u>	<u>Pressure Unit Measure Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Altitude Valve Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Natural Gas System**

FEATURE TYPE: **Natural gas valve point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting or device used for shutting or throttling flow through a line.**

FEATURE ATTRIBUTES FOR: Natural gas valve point

DATABASE INTEGRATION:

<u>Branch Name Code</u>	<u>Facility Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Natural Gas Junction Identifier</u>	<u>Natural Gas Line Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Diameter Code</u>	<u>Valve Dimension</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Natural Gas Valve Use Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Saltwater System**

FEATURE TYPE: **Saltwater anode point**

OBJECT TYPE: **Point**

DEFINITION: **A material used for utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.**

FEATURE ATTRIBUTES FOR: Saltwater anode point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Weight Unit Measure Code</u>	<u>Material Composition Code</u>	<u>Anode Weight</u>
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PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Saltwater System**

FEATURE TYPE: **Saltwater anode test station point**

OBJECT TYPE: **Point**

DEFINITION: **A central location where anodes are tested for performance.**

FEATURE ATTRIBUTES FOR: Saltwater anode test station point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Wire Type Code</u>	<u>Wire Size Code</u>	<u>Water Anode Test Station Type Code</u>
<u>Number of Terminal's Quantity</u>	<u>Insulation Type Code</u>	

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Saltwater System**

FEATURE TYPE: **Saltwater expansion joint point**

OBJECT TYPE: **Point**

DEFINITION: **Expansion joint in a saltwater distribution line.**

FEATURE ATTRIBUTES FOR: Saltwater expansion joint point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Saltwater System**

FEATURE TYPE: **Saltwater hose line**

OBJECT TYPE: **String/Chain**

DEFINITION: **A flexible conduit for conveying saltwater**

FEATURE ATTRIBUTES FOR: Saltwater hose line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Saltwater System**

FEATURE TYPE: **Saltwater line**

OBJECT TYPE: **String/Chain**

DEFINITION: **A pipe used to carry saltwater from location to location.**

FEATURE ATTRIBUTES FOR: Saltwater line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Saltwater System**

FEATURE TYPE: **Saltwater rectifier point**

OBJECT TYPE: **Point**

DEFINITION: **A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the distribution system.**

FEATURE ATTRIBUTES FOR: Saltwater rectifier point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Internal Meter Code</u>	<u>Enclosure Type Code</u>	<u>Cooling Method Code</u>
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PERFORMANCE:

<u>Current Output Amount</u>	<u>Current Unit Measure Code</u>	<u>Narrative Text</u>
<u>Number of Phases Quantity</u>	<u>Phase Letter Code</u>	<u>Voltage Input Code</u>
<u>Voltage Output Code</u>		

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Saltwater System**

FEATURE TYPE: **Saltwater valve pit point**

OBJECT TYPE: **Point**

DEFINITION: **A below grade chamber too small to enter, containing one or more valves.**

FEATURE ATTRIBUTES FOR: Saltwater valve pit point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Saltwater System**

FEATURE TYPE: **Saltwater valve point**

OBJECT TYPE: **Point**

DEFINITION: **A device to control flow through a saltwater line.**

FEATURE ATTRIBUTES FOR: Saltwater valve point

 DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS:Storm System

FEATURE TYPE: Storm sewer armor point

OBJECT TYPE: Point

DEFINITION: Any location where armor stone is used for erosion protection in an open channel.

FEATURE ATTRIBUTES FOR: Storm sewer armor point

 DATABASE INTEGRATION:

<u>Channel Reach Name</u>	<u>Facility Identifier</u>	<u>From X Coordinate</u>
<u>From Y Coordinate</u>	<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>	<u>Storm Sewer Open Drainage Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Top Width Dimension</u>	<u>Slope Measure Unit Code</u>	<u>Percentage Slope Right Channel Dimension</u>
<u>Percentage Slope Left Channel Dimension</u>	<u>Bottom Slope Percent</u>	<u>Invert Elevation Node 2 Dimension</u>
<u>Invert Elevation Node 1 Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Bottom Width Dimension</u>	<u>Bedding Material Code</u>	<u>Storm Sewer Armor Type Code</u>
<u>Length Dimension</u>		

PERFORMANCE:

Disposition Code Narrative Text

OPERATION/MAINTENANCE:

Acquired Date User Flag Text

FEATURE CLASS:Storm System

FEATURE TYPE: Storm sewer culvert line

OBJECT TYPE: String/Chain

DEFINITION: Interception and removal of ground water or surface water.

FEATURE ATTRIBUTES FOR: Storm sewer culvert line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>From X Coordinate</u>
<u>From Y Coordinate</u>	<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>
<u>Hydrographic Drainage Zone Code</u>	<u>Metadata Identifier</u>	<u>Storm Sewer Discharge Location Identifier</u>
<u>Storm Sewer Drainage Basin Identifier</u>	<u>Storm Sewer Pumping Station Identifier</u>	<u>To X Coordinate</u>
<u>To Y Coordinate</u>	<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>
<u>Water Treatment Plant Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Length Dimension</u>	<u>Drainage Pattern Code</u>	<u>Drainage Pipe Material Texture Code</u>
<u>Elevation Unit Measure Code</u>	<u>Invert Elevation Node 1 Dimension</u>	<u>Invert Elevation Node 2 Dimension</u>
<u>Lined Code</u>	<u>Dimension Unit Measure Code</u>	<u>Model Number Code</u>
<u>Gate Code</u>	<u>Inside Width Dimension</u>	<u>Screen Type Code</u>
<u>Pipe Diameter Measure Code</u>	<u>Bottom Slope Percent</u>	<u>Slope Measure Unit Code</u>
<u>Storm Sewer Line Type Code</u>	<u>Material Composition Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Maximum Pressure Rate</u>	<u>Narrative Text</u>
<u>Normal Pressure Rate</u>	<u>Pressure Unit Measure Code</u>	<u>Storm Sewer Line Use Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS:Storm System

FEATURE TYPE: Storm sewer discharge point

OBJECT TYPE: Point

DEFINITION: Any location where storm sewer pipes directly discharge effluent.

FEATURE ATTRIBUTES FOR: Storm sewer discharge point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Drainage Basin Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

Storm Sewer Discharge Location Type Code

PERFORMANCE:

Disposition Code Narrative Text

OPERATION/MAINTENANCE:

Acquired Date User Flag Text

FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer downspout point**

OBJECT TYPE: **Point**

DEFINITION: **A pipe normally attached to the side of a building or structure which conveys rainfall runoff from the roof area to the ground surface or an underground collection system.**

FEATURE ATTRIBUTES FOR: Storm sewer downspout point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Pumping Station Identifier</u>	<u>Unique Feature Identifier</u>	<u>Water Treatment Plant Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Storm Sewer Downspout Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Model Number Code</u>
<u>Material Composition Code</u>	<u>Discharge Point Ground Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Downspout Dimension</u>	<u>Dimension Unit Measure Code</u>	<u>Base Elevation Dimension</u>

PERFORMANCE:

Disposition Code Narrative Text

OPERATION/MAINTENANCE:

Acquired Date User Flag Text

FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer drainage basin area**

OBJECT TYPE: **G/GT Polygon**

DEFINITION: **An area in which surface runoff collects and from which it is carried by a drainage system.**

FEATURE ATTRIBUTES FOR: Storm sewer drainage basin area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Grade Unit Measure Code</u>
<u>Minimum Grade Angle</u>	<u>Mean Grade Angle</u>	<u>Maximum Grade Angle</u>
<u>Area Size Unit Measure Code</u>	<u>Drainage Basin Area</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer drainage divide line**

OBJECT TYPE: **String/Chain**

DEFINITION: **The border of a drainage basin where one side directs runoff to one basin and the other side directs runoff to a different basin.**

FEATURE ATTRIBUTES FOR: Storm sewer drainage divide line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer fitting point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting is an item used to connect, cap, plug or otherwise alter a pipe.**

FEATURE ATTRIBUTES FOR: Storm sewer fitting point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Discharge Location Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Storm Sewer Fitting Location Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>	<u>Material Composition Code</u>	<u>Fitting Width Dimension</u>
<u>Fitting Length Dimension</u>	<u>Fitting Depth Dimension</u>	<u>Dimension Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer flood area**

OBJECT TYPE: **G/GT Polygon**

DEFINITION: **Areas where the storm sewer drainage capacity has been exceeded resulting in localized flooding.**

FEATURE ATTRIBUTES FOR: Storm sewer flood area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Discharge Location Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>	<u>Storm Sewer Open Drainage Identifier</u>
<u>Unique Feature Identifier</u>		

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Dimension Unit Measure Code</u>	<u>Area Size Unit Measure Code</u>	<u>Flood Area</u>

PERFORMANCE:

<u>Flood Dimension</u>	<u>Flood Flow Rate</u>	<u>Flood Frequency Amount</u>
<u>Flow Unit Measure Code</u>	<u>Flow Width Dimension</u>	<u>Narrative Text</u>

OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer flow control point**

OBJECT TYPE: **Point**

DEFINITION: **Devices for a storm water system to control the pressure in and out of the open channel.**

FEATURE ATTRIBUTES FOR: Storm sewer flow control point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Drainage Basin Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Storm Sewer Flow Control Devices Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>	<u>Pump Station Type Code</u>	<u>Width Dimension</u>
<u>Length Dimension</u>	<u>Depth Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Dimension Unit Measure Code</u>	<u>Control Centerline Dimension</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer flow direction arrow**

OBJECT TYPE: **Arrow**

DEFINITION: **A flow direction arrow indicates the direction of flow through a line, valve, or component.**

FEATURE ATTRIBUTES FOR: Storm sewer flow direction arrow

DATABASE INTEGRATION:

PHYSICAL PROPERTIES:

PERFORMANCE:

OPERATION/MAINTENANCE:

FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer gate point**

OBJECT TYPE: **Point**

DEFINITION: **A movable barrier used in an open channel.**

FEATURE ATTRIBUTES FOR: Storm sewer gate point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Discharge Location Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>	<u>Storm Sewer Flow Control Devices Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Pipe Diameter Measure Code</u>	<u>Material Composition Code</u>	<u>Invert Elevation Dimension</u>
<u>Gate Width Dimension</u>	<u>Gate Class Type Code</u>	<u>Length Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Capacity Volume</u>	<u>Narrative Text</u>
<u>Rate Capacity Unit Measure Code</u>	<u>Structure Condition Code</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer headwall line**

OBJECT TYPE: String/Chain

DEFINITION: **A wall (of any material) at the end of a culvert or drain to serve one or more of the following purposes: protect fill from scour or undermining; increase hydraulic efficiency, divert direction of flow, and serve as a retaining wall.**

FEATURE ATTRIBUTES FOR: Storm sewer headwall line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>From X Coordinate</u>
<u>From Y Coordinate</u>	<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>To X Coordinate</u>	<u>To Y Coordinate</u>
<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>River Mile Reference Dimension</u>

PERFORMANCE:

<u>Narrative Text</u>	<u>Pollution Type Code</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS:Storm System

FEATURE TYPE: Storm sewer headwall point

OBJECT TYPE: Point

DEFINITION: A wall (of any material) at the end of a culvert or drain to serve one or more of the following purposes: protect fill from scour or undermining; increase hydraulic efficiency, divert direction of flow, and serve as a retaining wall.

FEATURE ATTRIBUTES FOR: Storm sewer headwall point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>From X Coordinate</u>
<u>From Y Coordinate</u>	<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>To X Coordinate</u>	<u>To Y Coordinate</u>
<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

River Mile Reference Dimension

PERFORMANCE:

Narrative Text Pollution Type Code

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS:Storm System

FEATURE TYPE: Storm sewer inlet point

OBJECT TYPE: Point

DEFINITION: The location where water is collected and received into the utility system.

FEATURE ATTRIBUTES FOR: Storm sewer inlet point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Discharge Location Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

Weir Elevation Dimension Model Number Code Invert Elevation Dimension

Elevation Unit Measure Code Design Capacity Volume

PERFORMANCE:

Disposition Code Flow Unit Measure Code Inlet Step Domain Discriminator

Narrative Text

OPERATION/MAINTENANCE:

Acquired Date User Flag Text

FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer junction point**

OBJECT TYPE: **Point**

DEFINITION: **A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.**

FEATURE ATTRIBUTES FOR: Storm sewer junction point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Discharge Location Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Storm Sewer Junction Type Code</u>	<u>Rim Dimension</u>	<u>Number of Pipes Quantity</u>
<u>Model Number Code</u>	<u>Width Dimension</u>	<u>Length Dimension</u>
<u>Manhole Diameter Dimension</u>	<u>Material Composition Code</u>	<u>Invert Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Drain Type Code</u>	<u>Dimension Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Storm Sewer Junction Use Code</u>
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OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer line**

OBJECT TYPE: **String/Chain**

DEFINITION: **A pipe used to carry a substance from location to location (main line, service line, vent line, etc).**

FEATURE ATTRIBUTES FOR: Storm sewer line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>From X Coordinate</u>
<u>From Y Coordinate</u>	<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>
<u>Hydrographic Drainage Zone Code</u>	<u>Metadata Identifier</u>	<u>Storm Sewer Discharge Location Identifier</u>
<u>Storm Sewer Drainage Basin Identifier</u>	<u>Storm Sewer Pumping Station Identifier</u>	<u>To X Coordinate</u>
<u>To Y Coordinate</u>	<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>
<u>Water Treatment Plant Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Length Dimension</u>	<u>Drainage Pattern Code</u>	<u>Drainage Pipe Material Texture Code</u>
<u>Elevation Unit Measure Code</u>	<u>Invert Elevation Node 1 Dimension</u>	<u>Invert Elevation Node 2 Dimension</u>
<u>Lined Code</u>	<u>Dimension Unit Measure Code</u>	<u>Model Number Code</u>
<u>Gate Code</u>	<u>Inside Width Dimension</u>	<u>Screen Type Code</u>
<u>Pipe Diameter Measure Code</u>	<u>Bottom Slope Percent</u>	<u>Slope Measure Unit Code</u>
<u>Storm Sewer Line Type Code</u>	<u>Material Composition Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Maximum Pressure Rate</u>	<u>Narrative Text</u>
<u>Normal Pressure Rate</u>	<u>Pressure Unit Measure Code</u>	<u>Storm Sewer Line Use Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer marker point**

OBJECT TYPE: **Point**

DEFINITION: **A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.**

FEATURE ATTRIBUTES FOR: Storm sewer marker point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>General Markers Type Code</u>	<u>Soil Consistency Code</u>	<u>Sign Width Dimension</u>
<u>Sign Text</u>	<u>Sign Material Composition Code</u>	<u>Sign Height Dimension</u>
<u>Pole Material Code</u>	<u>Pole Height Dimension</u>	<u>Pole Depth Dimension</u>
<u>Model Number Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rock Condition Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: Storm System

FEATURE TYPE: Storm sewer oil water separator site

OBJECT TYPE: Point/Polygon

DEFINITION: A device or structure placed in the water stream to separate water from oil products.

FEATURE ATTRIBUTES FOR: Storm sewer oil water separator site

 DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Permit Number Identifier</u>	<u>Pipe Inlet Identifier</u>
<u>Pipe Outflow Identifier</u>	<u>Storm Sewer Discharge Location Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>
<u>Storm Sewer Pumping Station Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>Oil & Water Separator Area</u>	<u>Storm Sewer Oil Water Separator Type Code</u>	<u>Oil & Water Separator Code</u>
<u>Grit Chamber Type Code</u>		

PERFORMANCE:

<u>Capacity Unit Measure Code</u>	<u>Contents Descriptive Text</u>	<u>Disposal Description Text</u>
<u>Disposition Code</u>	<u>Flow Capacity Volume</u>	<u>Flow Unit Measure Code</u>
<u>Narrative Text</u>	<u>Oil Capacity Volume</u>	<u>Optimum Operating Temperature</u>
<u>Process Type Name</u>	<u>Separator Volume</u>	<u>Temperature Unit Measure Code</u>
<u>Volume Unit Measure Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Permit Expiration Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer open drainage line**

OBJECT TYPE: **String/Chain**

DEFINITION: **Interception and removal of ground water or surface water by natural means.**

FEATURE ATTRIBUTES FOR: Storm sewer open drainage line

DATABASE INTEGRATION:

<u>Channel Reach Name</u>	<u>Facility Identifier</u>	<u>Flood Zone Local Name Code</u>
<u>From X Coordinate</u>	<u>From Y Coordinate</u>	<u>From Z Coordinate</u>
<u>Graphic Feature Link</u>	<u>Hydrographic Drainage Zone Code</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Discharge Location Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>	<u>To X Coordinate</u>
<u>To Y Coordinate</u>	<u>To Z Coordinate</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Elevation Unit Measure Code</u>	<u>Bank Armor Type Code</u>	<u>Bedding Material Code</u>
<u>Bottom Width Dimension</u>	<u>Channel Length Dimension</u>	<u>Channel Style Code</u>
<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	<u>Top Width Dimension</u>
<u>Invert Elevation Node 1 Dimension</u>	<u>Invert Elevation Node 2 Dimension</u>	<u>Bottom Slope Percent</u>
<u>Percentage Slope Left Channel Dimension</u>	<u>Percentage Slope Right Channel Dimension</u>	<u>Slope Measure Unit Code</u>
<u>Drainage Design Discriminator</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Flood Depth Dimension</u>	<u>Flow Unit Measure Code</u>
<u>Mean Flow Cross Section Dimension</u>	<u>Mean Flow Dimension</u>	<u>Mean Flow Rate</u>
<u>Narrative Text</u>	<u>Number of Floods Quantity</u>	<u>Top Width of Mean Flow Dimension</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer pump point**

OBJECT TYPE: **Point**

DEFINITION: **A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.**

FEATURE ATTRIBUTES FOR: Storm sewer pump point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>	<u>Storm Sewer Discharge Location Identifier</u>
<u>Storm Sewer Drainage Basin Identifier</u>	<u>Storm Sewer Pumping Station Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Storm Sewer Pump Type Code</u>	<u>Serial Number Code</u>	<u>Centerline Dimension</u>
<u>Model Number Code</u>	<u>Elevation Unit Measure Code</u>	<u>Cooling Method Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Rate</u>	<u>Flow Unit Measure Code</u>
<u>Horsepower Rate</u>	<u>Measured Outflow Volume</u>	<u>Narrative Text</u>
<u>Storm Sewer Pump Use Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Priming Method Code</u>	<u>Priming Requirement Indicator Code</u>
<u>User Flag Text</u>		

FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer pump station site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.**

FEATURE ATTRIBUTES FOR: Storm sewer pump station site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Storm Sewer Discharge Location Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Station Width Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>High Water Dimension</u>
<u>Invert Elevation Dimension</u>	<u>Number of Pumps Quantity</u>	<u>Nodal Elevation Dimension</u>
<u>Dimension Unit Measure Code</u>	<u>Station Length Dimension</u>	<u>Perimeter Unit Measure Code</u>
<u>Storm Sewer Pumping Station Type Code</u>	<u>Water Elevation Dimension</u>	<u>River Mile Reference Dimension</u>
<u>Station Area</u>	<u>Area Size Unit Measure Code</u>	<u>Perimeter Dimension</u>
<u>Centerline Dimension</u>		

PERFORMANCE:

<u>Capacity Measure Code</u>	<u>Disposition Code</u>	<u>Narrative Text</u>
<u>Output Capacity Rate</u>	<u>Rate Capacity Unit Measure Code</u>	<u>Structure Condition Code</u>
<u>Wet Well Capacity Volume</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Alarm High Level Dimension</u>	<u>End Date</u>
<u>User Flag Text</u>		

FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer reservoir point**

OBJECT TYPE: **Point**

DEFINITION: **The location where storm sewer water is collected.**

FEATURE ATTRIBUTES FOR: Storm sewer reservoir point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Outlet Control Identifier</u>	<u>Storm Sewer Discharge Location Identifier</u>
<u>Storm Sewer Drainage Basin Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Cross Dikes Code</u>	<u>Reservoir Width Dimension</u>	<u>Storm Sewer Collection Reservoirs Type Code</u>
<u>Length Dimension</u>	<u>Invert Elevation Average Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Dimension Unit Measure Code</u>		

PERFORMANCE:

<u>Average Depth Dimension</u>	<u>Disposition Code</u>	<u>Narrative Text</u>
<u>Storm Sewer Collection Reservoirs Use Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Constructed Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Storm System**

FEATURE TYPE: **Storm sewer stilling basin site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **The location where the energy from turbulent water flow is reduced.**

FEATURE ATTRIBUTES FOR: Storm sewer stilling basin site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Outlet Control Identifier</u>	<u>Storm Sewer Discharge Location Identifier</u>
<u>Storm Sewer Drainage Basin Identifier</u>	<u>Storm Sewer Flow Control Devices Identifier</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>Stilling Basin Area</u>	<u>Cross Dikes Code</u>	<u>Storm Sewer Stilling Basin Type Code</u>
<u>Stilling Basin Width Dimension</u>	<u>Length Dimension</u>	<u>Invert Elevation Average Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Average Depth Dimension</u>	<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Constructed Date</u>	<u>User Flag Text</u>
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FEATURE CLASS:**Storm System**

FEATURE TYPE: **Storm sewer valve point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting or device used for shutting or throttling flow through a line.**

FEATURE ATTRIBUTES FOR: Storm sewer valve point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Storm Sewer Discharge Location Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>	<u>Storm Sewer Junction Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Valve Dimension</u>	<u>Pipe Diameter Measure Code</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Storm Sewer Valve Use Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater anode point**

OBJECT TYPE: **Point**

DEFINITION: **A material used for utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.**

FEATURE ATTRIBUTES FOR: Wastewater anode point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Weight Unit Measure Code</u>	<u>Material Composition Code</u>	<u>Anode Weight</u>
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PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater anode test station point**

OBJECT TYPE: **Point**

DEFINITION: **A central location where anodes are tested for performance.**

FEATURE ATTRIBUTES FOR: Wastewater anode test station point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Wire Type Code</u>	<u>Wire Size Code</u>	<u>Water Anode Test Station Type Code</u>
<u>Number of Terminal's Quantity</u>	<u>Insulation Type Code</u>	

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater discharge point**

OBJECT TYPE: **Point**

DEFINITION: **Any location where wastewater pipes directly discharge effluent.**

FEATURE ATTRIBUTES FOR: **Wastewater discharge point**

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Wastewater Drain Field Identifier</u>
<u>Wastewater Stilling Tank Identifier</u>	<u>Wastewater Treatment Plant Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Wastewater System Discharge Location Type Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater disposal tank site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.**

FEATURE ATTRIBUTES FOR: Wastewater disposal tank site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Permit Number Identifier</u>	<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Depth Dimension</u>	<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Elevation Unit Measure Code</u>	<u>Normal Head Dimension</u>	<u>Head Units Unit Measure Code</u>
<u>Invert Elevation Dimension</u>	<u>Material Composition Code</u>	<u>Interior Tank Area</u>
<u>Serial Number Code</u>	<u>Perimeter Unit Measure Code</u>	<u>Description Code</u>
<u>Tank Diameter Dimension</u>	<u>Length Dimension</u>	<u>Tank Style Code</u>
<u>Tank Width Dimension</u>	<u>Top Dimension</u>	<u>Perimeter Dimension</u>
<u>Model Number Code</u>		

PERFORMANCE:

<u>Capacity Volume</u>	<u>Disposition Code</u>	<u>Narrative Text</u>
<u>Normal Pressure Rate</u>	<u>Overflow Dimension</u>	<u>Pressure Unit Measure Code</u>
<u>Rate Capacity Unit Measure Code</u>	<u>Wastewater Disposal Tank Use Code</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Altitude Valve Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater downspout point**

OBJECT TYPE: **Point**

DEFINITION: **A pipe normally attached to the side of a building or structure which conveys rainfall runoff from the roof area to the ground surface or an underground collection system.**

FEATURE ATTRIBUTES FOR: Wastewater downspout point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>Wastewater Drain Field Identifier</u>	<u>Wastewater Pump Ejector Station Identifier</u>
<u>Wastewater Treatment Plant Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Wastewater Downspout Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Model Number Code</u>
<u>Material Composition Code</u>	<u>Discharge Point Ground Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Downspout Dimension</u>	<u>Dimension Unit Measure Code</u>	<u>Base Elevation Dimension</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: Wastewater System

FEATURE TYPE: Wastewater drain field area

OBJECT TYPE: G/GT Polygon

DEFINITION: The area of influence where perforated pipe placed in gravel trenches carries effluent from a waste storage containment for percolation into the earth.

FEATURE ATTRIBUTES FOR: Wastewater drain field area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Wastewater Pump Ejector Station Identifier</u>
<u>Wastewater Stilling Tank Identifier</u>	<u>Wastewater Treatment Plant Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Model Number Code</u>	<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Drainage Pattern Code</u>	<u>Drainage Pipe Material Texture Code</u>	<u>Elevation Unit Measure Code</u>
<u>Invert Elevation Node 1 Dimension</u>	<u>Invert Elevation Node 2 Dimension</u>	<u>Drainage Basin Area</u>
<u>Material Composition Code</u>	<u>Line Location Type Code</u>	<u>Perimeter Dimension</u>
<u>Perimeter Unit Measure Code</u>	<u>Length Dimension</u>	<u>Pipe Diameter Measure Code</u>
<u>Bottom Slope Percent</u>	<u>Slope Measure Unit Code</u>	<u>Wastewater Drain Field Type Code</u>
<u>Lined Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Maximum Pressure Rate</u>	<u>Narrative Text</u>
<u>Normal Pressure Rate</u>	<u>Pressure Unit Measure Code</u>	<u>Wastewater Drain Field Use Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: Wastewater System

FEATURE TYPE: Wastewater filtration bed area

OBJECT TYPE: G/GT Polygon

DEFINITION: A below grade system consisting of perforated piping installed in sand or gravel beds or trenches designed to permit the uniform distribution and absorption of effluent from a septic tank or aerobic unit into the soil.

FEATURE ATTRIBUTES FOR: Wastewater filtration bed area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Drainage Lateral Average Length Dimension</u>	<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Field Drain Style Code</u>	<u>Drainage Pattern Code</u>	<u>Drainage Pipe Material Texture Code</u>
<u>Distribution Box Code</u>	<u>Distribution Box Invert Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Invert Elevation Node 1 Dimension</u>	<u>Invert Elevation Node 2 Dimension</u>	<u>Stilling Tank Area</u>
<u>Drainage Lateral Total Length Dimension</u>	<u>Trench Width Dimension</u>	<u>Length Unit Measure Code</u>
<u>Material Composition Code</u>	<u>Number of Laterals Quantity</u>	<u>Perimeter Dimension</u>
<u>Perimeter Unit Measure Code</u>	<u>Slope Measure Unit Code</u>	<u>Depth Dimension</u>
<u>Length Dimension</u>	<u>Tank Style Code</u>	<u>Tank Width Dimension</u>
<u>Average Drainage Lateral Slope Angle</u>		

PERFORMANCE:

<u>Capacity Volume</u>	<u>Disposition Code</u>	<u>Flow Rate</u>
<u>Flow Unit Measure Code</u>	<u>Narrative Text</u>	<u>Rate Capacity Unit Measure Code</u>
<u>Soil Percolation Rate</u>	<u>Soil Percolation Unit Measure Code</u>	<u>Structure Condition Code</u>
<u>Wastewater Stilling Tank Use Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Manhole Accessible Boolean Value Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater fitting point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting is an item used to connect, cap, plug or otherwise alter a pipe.**

FEATURE ATTRIBUTES FOR: Wastewater fitting point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Wastewater Drain Field Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Wastewater Fitting Location Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Model Number Code</u>	<u>Material Composition Code</u>	<u>Fitting Width Dimension</u>
<u>Fitting Length Dimension</u>	<u>Fitting Depth Dimension</u>	<u>Dimension Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater flow direction arrow**

OBJECT TYPE: **Arrow**

DEFINITION: **A flow direction arrow indicates the direction of flow through a line, valve, or component.**

FEATURE ATTRIBUTES FOR: Wastewater flow direction arrow

DATABASE INTEGRATION:

PHYSICAL PROPERTIES:

PERFORMANCE:

OPERATION/MAINTENANCE:

FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater grease trap point**

OBJECT TYPE: **Point**

DEFINITION: **A tank which separates grease from water, collects the grease for removal, and allows the water to exit.**

FEATURE ATTRIBUTES FOR: Wastewater grease trap point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>	<u>Tributary Utility Subsystem Code</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Laterals Total Diameter Dimension</u>	<u>Field Drain Style Code</u>	<u>Drainage Pattern Code</u>
<u>Drainage Pipe Material Texture Code</u>	<u>Distribution Box Code</u>	<u>Distribution Box Invert Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Depth Dimension</u>	<u>Length Dimension</u>
<u>Inside Width Dimension</u>	<u>Dimension Unit Measure Code</u>	<u>Invert Elevation Node 2 Dimension</u>
<u>Trench Width Dimension</u>	<u>Laterals Diameter Unit Measure Code</u>	<u>Laterals Average Diameter Dimension</u>
<u>Average Drainage Lateral Slope Angle</u>	<u>Drainage Lateral Total Length Dimension</u>	<u>Drainage Lateral Average Length Dimension</u>
<u>Length Unit Measure Code</u>	<u>Material Composition Code</u>	<u>Number of Laterals Quantity</u>
<u>Slope Measure Unit Code</u>	<u>Tank Style Code</u>	<u>Invert Elevation Node 1 Dimension</u>

PERFORMANCE:

<u>Capacity Unit Measure Code</u>	<u>Capacity Volume</u>	<u>Disposition Code</u>
<u>Flow Rate</u>	<u>Flow Unit Measure Code</u>	<u>Narrative Text</u>
<u>Soil Percolation Rate</u>	<u>Soil Percolation Unit Measure Code</u>	<u>Structure Condition Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Manhole Accessible Boolean Value Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: Wastewater System

FEATURE TYPE: Wastewater grit chamber point

OBJECT TYPE: Point

DEFINITION: A chamber designed to remove sand, gravel, or other heavy solids that have subsiding velocities or specific gravities substantially greater than those of the organic solids in the waste water.

FEATURE ATTRIBUTES FOR: Wastewater grit chamber point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>	<u>Tributary Utility Subsystem Code</u>
<u>Unique Feature Identifier</u>	<u>Wastewater Treatment Plant Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Oil-Water Separator Code</u>	<u>Grit Type Code</u>
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PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Capacity Volume</u>	<u>Flow Unit Measure Code</u>
<u>Grit Chamber Storage Capacity Volume</u>	<u>Narrative Text</u>	<u>Rate Capacity Unit Measure Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater inlet point**

OBJECT TYPE: **Point**

DEFINITION: **The location where waste water is collected and received into the utility system.**

FEATURE ATTRIBUTES FOR: Wastewater inlet point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Wastewater Drain Field Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Weir Elevation Dimension</u>	<u>Model Number Code</u>	<u>Invert Elevation Dimension</u>
<u>Inlet Style Code</u>	<u>Elevation Unit Measure Code</u>	<u>Design Capacity Volume</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater junction point**

OBJECT TYPE: **Point**

DEFINITION: **A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.**

FEATURE ATTRIBUTES FOR: Wastewater junction point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Wastewater Junction Type Code</u>	<u>Rim Dimension</u>	<u>Manhole Reactance Amount</u>
<u>Manhole Number of Pipes Quantity</u>	<u>Manhole Neutralization Agent Name</u>	<u>Model Number Code</u>
<u>Width Dimension</u>	<u>Length Dimension</u>	<u>Manhole Diameter Dimension</u>
<u>Material Composition Code</u>	<u>Manhole Liner Type Code</u>	<u>Invert Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Drain Type Code</u>	<u>Dimension Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Wastewater Junction Use Code</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: Wastewater System

FEATURE TYPE: Wastewater lagoon area

OBJECT TYPE: G/GT Polygon

DEFINITION: A shallow man made pool or pond for the purpose of providing treatment of domestic wastewater.

FEATURE ATTRIBUTES FOR: Wastewater lagoon area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Laboratory Name Code</u>
<u>Metadata Identifier</u>	<u>Name Code</u>	<u>Outlet Control Identifier</u>
<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>	<u>Storm Sewer Drainage Basin Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Wastewater System Discharge Location Identifier</u>
<u>Wastewater Treatment Plant Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Perimeter Dimension</u>	<u>Aerator Power Rating Amount</u>	<u>Lagoon Area</u>
<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	<u>Elevation Unit Measure Code</u>
<u>Invert Elevation Average Dimension</u>	<u>Laboratory Type Code</u>	<u>Length Dimension</u>
<u>Aerator Indicator Code</u>	<u>Number of Pumps Quantity</u>	<u>Cross Dikes Code</u>
<u>Perimeter Unit Measure Code</u>	<u>Lagoon Pipe Outlet Code</u>	<u>Soil Consistency Code</u>
<u>Soil Erosion Code</u>	<u>Soil Family Code</u>	<u>Soil Texture Code</u>
<u>Wastewater Lagoon Type Code</u>	<u>Weir Outlets Code</u>	<u>Lagoon Width Dimension</u>

PERFORMANCE:

<u>Average Depth Dimension</u>	<u>Horsepower Unit Measure Code</u>	<u>Narrative Text</u>
<u>Sanitary Wastewater Use Code</u>	<u>Wastewater Lagoon Use Code</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Analysis Date</u>	<u>Constructed Date</u>
<u>Frequency Unit Measure Code</u>	<u>Managing Office Code</u>	<u>Monitoring Agency Name</u>
<u>Sampling Frequency Rate</u>	<u>Test Type Code</u>	<u>User Flag Text</u>

FEATURE CLASS: Wastewater System

FEATURE TYPE: Wastewater line

OBJECT TYPE: String/Chain

DEFINITION: A pipe used to carry a substance from location to location (main line, service line, force main line, etc).

FEATURE ATTRIBUTES FOR: **Wastewater line**

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Wastewater Pump Ejector Station Identifier</u>
<u>Wastewater Stilling Tank Identifier</u>	<u>Wastewater Treatment Plant Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Model Number Code</u>	<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Drainage Pattern Code</u>	<u>Drainage Pipe Material Texture Code</u>	<u>Elevation Unit Measure Code</u>
<u>Invert Elevation Node 1 Dimension</u>	<u>Invert Elevation Node 2 Dimension</u>	<u>Drainage Basin Area</u>
<u>Material Composition Code</u>	<u>Line Location Type Code</u>	<u>Perimeter Dimension</u>
<u>Perimeter Unit Measure Code</u>	<u>Length Dimension</u>	<u>Pipe Diameter Measure Code</u>
<u>Bottom Slope Percent</u>	<u>Slope Measure Unit Code</u>	<u>Wastewater Drain Field Type Code</u>
<u>Lined Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Maximum Pressure Rate</u>	<u>Narrative Text</u>
<u>Normal Pressure Rate</u>	<u>Pressure Unit Measure Code</u>	<u>Wastewater Drain Field Use Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater marker point**

OBJECT TYPE: **Point**

DEFINITION: **A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.**

FEATURE ATTRIBUTES FOR: Wastewater marker point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>General Markers Type Code</u>	<u>Soil Consistency Code</u>	<u>Sign Width Dimension</u>
<u>Sign Text</u>	<u>Sign Material Composition Code</u>	<u>Sign Height Dimension</u>
<u>Pole Material Code</u>	<u>Pole Height Dimension</u>	<u>Pole Depth Dimension</u>
<u>Model Number Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rock Condition Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: Wastewater System

FEATURE TYPE: Wastewater meter point

OBJECT TYPE: Point

DEFINITION: A device installed in a line for measuring the quantity and or rate of water through a section of line.

FEATURE ATTRIBUTES FOR: Wastewater meter point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>Wastewater Drain Field Identifier</u>	<u>Wastewater Junction Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Wastewater Meter Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Width Dimension</u>	<u>Length Dimension</u>	<u>Depth Dimension</u>
<u>Model Number Code</u>	<u>Meter Dimension</u>	<u>Pump Station Type Code</u>
<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	<u>Meter Design Discriminator</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater neutralizer point**

OBJECT TYPE: **Point**

DEFINITION: **A receptacle or chamber, which by chemical reactions with reactant materials in the receptacle, makes liquid waste passing through the receptacle chemically neutral.**

FEATURE ATTRIBUTES FOR: Wastewater neutralizer point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Wastewater Neutralizer Type Code</u>	<u>Rim Dimension</u>	<u>Reactance Amount</u>
<u>Number of Pipes Quantity</u>	<u>Exterior Width Dimension</u>	<u>Length Dimension</u>
<u>Diameter Dimension</u>	<u>Neutralization Agent Name</u>	<u>Model Number Code</u>
<u>Material Composition Code</u>	<u>Liner Type Code</u>	<u>Invert Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Drain Type Code</u>	<u>Dimension Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater oil water separator site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **A device or structure placed in the waste stream to separate water from oil products.**

FEATURE ATTRIBUTES FOR: Wastewater oil water separator site

 DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Permit Number Identifier</u>	<u>Pipe Inlet Identifier</u>
<u>Pipe Outflow Identifier</u>	<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>
<u>Wastewater Pump Ejector Station Identifier</u>	<u>Wastewater Stilling Tank Identifier</u>	<u>Wastewater Treatment Plant Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>Oil & Water Separator Area</u>	<u>Wastewater Oil & Water Separator Type Code</u>	<u>Oil & Water Separator Code</u>
<u>Grit Chamber Type Code</u>		

PERFORMANCE:

<u>Capacity Unit Measure Code</u>	<u>Contents Descriptive Text</u>	<u>Disposal Description Text</u>
<u>Disposition Code</u>	<u>Flow Capacity Volume</u>	<u>Flow Unit Measure Code</u>
<u>Narrative Text</u>	<u>Oil Capacity Volume</u>	<u>Optimum Operating Temperature</u>
<u>Process Type Name</u>	<u>Separator Volume</u>	<u>Temperature Unit Measure Code</u>
<u>Volume Unit Measure Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Permit Expiration Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater pump ejector station site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.**

FEATURE ATTRIBUTES FOR: Wastewater pump ejector station site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Wastewater Treatment Plant Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>Station Area</u>	<u>Wastewater Pump Ejector Station Type Code</u>	<u>Station Width Dimension</u>
<u>Length Dimension</u>	<u>Centerline Dimension</u>	<u>Nodal Elevation Dimension</u>
<u>Number of Pumps Quantity</u>	<u>Invert Elevation Dimension</u>	<u>High Water Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>	<u>Pump Design Discriminator</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rate Capacity Unit Measure Code</u>
<u>Structure Condition Code</u>	<u>Wet Well Capacity Volume</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Alarm High Level Dimension</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater pump point**

OBJECT TYPE: **Point**

DEFINITION: **A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.**

FEATURE ATTRIBUTES FOR: Wastewater pump point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Feature Name</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Wastewater Pump Ejector Station Identifier</u>
<u>Wastewater Treatment Plant Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>River Mile Reference Dimension</u>	<u>Number of Pumps Quantity</u>	<u>Wastewater Pump Type Code</u>
<u>Serial Number Code</u>	<u>Centerline Dimension</u>	<u>Model Number Code</u>
<u>Elevation Unit Measure Code</u>	<u>Cooling Method Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>	<u>Horsepower Rate</u>
<u>Measured Outflow Volume</u>	<u>Narrative Text</u>	<u>Rated Outflow Volume</u>
<u>Wastewater Pump Use Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Priming Method Code</u>	<u>Priming Requirement Indicator Code</u>
<u>User Flag Text</u>		

FEATURE CLASS: Wastewater System

FEATURE TYPE: Wastewater rectifier point

OBJECT TYPE: Point

DEFINITION: A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the distribution system.

FEATURE ATTRIBUTES FOR: Wastewater rectifier point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Internal Meter Code</u>	<u>Enclosure Type Code</u>	<u>Cooling Method Code</u>
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PERFORMANCE:

<u>Current Output Amount</u>	<u>Current Unit Measure Code</u>	<u>Narrative Text</u>
<u>Number of Phases Quantity</u>	<u>Phase Letter Code</u>	<u>Voltage Input Code</u>
<u>Voltage Output Code</u>		

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater septic tank point**

OBJECT TYPE: **Point**

DEFINITION: **Typically, a below grade receptacle or chamber in which solid organic waste is decomposed and purified by anaerobic bacteria.**

FEATURE ATTRIBUTES FOR: Wastewater septic tank point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Drainage Lateral Average Length Dimension</u>	<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Field Drain Style Code</u>	<u>Drainage Pattern Code</u>	<u>Drainage Pipe Material Texture Code</u>
<u>Distribution Box Code</u>	<u>Distribution Box Invert Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Invert Elevation Node 1 Dimension</u>	<u>Invert Elevation Node 2 Dimension</u>	<u>Stilling Tank Area</u>
<u>Drainage Lateral Total Length Dimension</u>	<u>Trench Width Dimension</u>	<u>Length Unit Measure Code</u>
<u>Material Composition Code</u>	<u>Number of Laterals Quantity</u>	<u>Perimeter Dimension</u>
<u>Perimeter Unit Measure Code</u>	<u>Slope Measure Unit Code</u>	<u>Depth Dimension</u>
<u>Length Dimension</u>	<u>Tank Style Code</u>	<u>Tank Width Dimension</u>
<u>Average Drainage Lateral Slope Angle</u>		

PERFORMANCE:

<u>Capacity Volume</u>	<u>Disposition Code</u>	<u>Flow Rate</u>
<u>Flow Unit Measure Code</u>	<u>Narrative Text</u>	<u>Rate Capacity Unit Measure Code</u>
<u>Soil Percolation Rate</u>	<u>Soil Percolation Unit Measure Code</u>	<u>Structure Condition Code</u>
<u>Wastewater Stilling Tank Use Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Manhole Accessible Boolean Value Code</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater sludge bed area**

OBJECT TYPE: **G/GT Polygon**

DEFINITION: **An area used for spreading and drying waste sludge.**

FEATURE ATTRIBUTES FOR: Wastewater sludge bed area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Permit Number Identifier</u>	<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>Sludge Drying Bed Area</u>	<u>Elevation Unit Measure Code</u>	<u>Invert Elevation Dimension</u>
<u>Dimension Unit Measure Code</u>	<u>Depth Dimension</u>	<u>Drying Bed Diameter Dimension</u>
<u>Length Dimension</u>	<u>Sludge Bed Width Dimension</u>	<u>Material Value Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rate Capacity Unit Measure Code</u>
<u>Sludge Bed Capacity Volume</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: Wastewater System

FEATURE TYPE: Wastewater treatment plant site

OBJECT TYPE: Point/Polygon

DEFINITION: Equipment; or a structure containing equipment, processes, piping, or components; used to treat and remove unwanted constituents.

FEATURE ATTRIBUTES FOR: Wastewater treatment plant site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Treatment Plant Type Code</u>	<u>Plant Width Dimension</u>	<u>Length Dimension</u>
<u>Plant Dimension</u>	<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>
<u>Number of Pumps Quantity</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Bypass Code</u>	<u>Area Size Unit Measure Code</u>	<u>Plant Area</u>

PERFORMANCE:

<u>Actual Plant Flow Rate</u>	<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>
<u>Narrative Text</u>	<u>Rated Flow Capacity Rate</u>	<u>Structure Condition Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater treatment unit site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **A waste water treatment plant and all appurtenant equipment, buildings, and facilities relating to water treatment.**

FEATURE ATTRIBUTES FOR: Wastewater treatment unit site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Treatment Plant Type Code</u>	<u>Plant Width Dimension</u>	<u>Length Dimension</u>
<u>Plant Dimension</u>	<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>
<u>Number of Pumps Quantity</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Bypass Code</u>	<u>Area Size Unit Measure Code</u>	<u>Plant Area</u>

PERFORMANCE:

<u>Actual Plant Flow Rate</u>	<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>
<u>Narrative Text</u>	<u>Rated Flow Capacity Rate</u>	<u>Structure Condition Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Wastewater System**

FEATURE TYPE: **Wastewater valve point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting or device used for shutting or throttling flow through a line.**

FEATURE ATTRIBUTES FOR: Wastewater valve point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Wastewater Drain Field Identifier</u>
<u>Wastewater Junction Identifier</u>	<u>Wastewater Treatment Plant Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Valve Dimension</u>	<u>Pipe Diameter Measure Code</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Wastewater Valve Use Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water anode point**

OBJECT TYPE: **Point**

DEFINITION: **A material used for utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.**

FEATURE ATTRIBUTES FOR: Water anode point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Weight Unit Measure Code</u>	<u>Material Composition Code</u>	<u>Anode Weight</u>
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PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: **Water System**

FEATURE TYPE: **Water anode test station point**

OBJECT TYPE: **Point**

DEFINITION: **A central location where anodes are tested for performance.**

FEATURE ATTRIBUTES FOR: Water anode test station point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Wire Type Code</u>	<u>Wire Size Code</u>	<u>Water Anode Test Station Type Code</u>
<u>Number of Terminal's Quantity</u>	<u>Insulation Type Code</u>	

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

FEATURE CLASS: Water System

FEATURE TYPE: Water fire connection point

OBJECT TYPE: Point

DEFINITION: An apparatus which dispenses fluids for use in fire management.

FEATURE ATTRIBUTES FOR: Water fire connection point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>Water Line Identifier</u>	<u>Water Valve Location Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Model Number Code</u>	<u>Diameter Unit Measure Code</u>	<u>Elevation Unit Measure Code</u>
<u>Ground Elevation Dimension</u>	<u>Hydrant Dimension</u>	<u>Hydrant Type Code</u>
<u>Connection Design Code</u>	<u>Hydrant Measure Type Code</u>	<u>Fire Hydrant Classification Code</u>
<u>Hydrant Outlet 1 Diameter Dimension</u>	<u>Outlet 2 Diameter Dimension</u>	<u>Outlet 3 Diameter Dimension</u>
<u>Pipe Diameter Measure Code</u>	<u>Hydrant Size Unit Measure Code</u>	<u>Valve Style Code</u>
<u>Inlet Diameter Dimension</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>	<u>Hydrant Required Fire Flow Rate</u>
<u>Maximum Pressure Rate</u>	<u>Narrative Text</u>	<u>Pressure Unit Measure Code</u>
<u>Static Pressure Head Rate</u>	<u>Water Residual Pressure Rate</u>	<u>Water Source Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Flow Test Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water fitting point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting is an item used to connect, cap, plug or otherwise alter a pipe.**

FEATURE ATTRIBUTES FOR: Water fitting point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>Water Line Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Water Fitting Type Code</u>	<u>Dimension Unit Measure Code</u>	<u>Pipe Diameter Measure Code</u>
<u>Serial Number Code</u>	<u>Model Number Code</u>	<u>Material Composition Code</u>
<u>Ground Elevation Dimension</u>	<u>Fitting Width Dimension</u>	<u>Fitting Length Dimension</u>
<u>Fitting Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Diameter Unit Measure Code</u>	<u>Fitting Diameter Dimension</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water hydrant point**

OBJECT TYPE: **Point**

DEFINITION: **An apparatus which dispenses fluids.**

FEATURE ATTRIBUTES FOR: Water hydrant point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>Water Line Identifier</u>	<u>Water Valve Location Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Size Unit Measure Code</u>	<u>Pipe Diameter Measure Code</u>
<u>Outlet 3 Diameter Dimension</u>	<u>Outlet 2 Diameter Dimension</u>	<u>Outlet 1 Diameter Dimension</u>
<u>Model Number Code</u>	<u>Measure Type Code</u>	<u>Inlet Diameter Dimension</u>
<u>Hydrant Type Code</u>	<u>Hydrant Dimension</u>	<u>Ground Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Diameter Unit Measure Code</u>	<u>Hydrant Design Discriminator</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>	<u>Hydrant Required Fire Flow Rate</u>
<u>Maximum Pressure Rate</u>	<u>Narrative Text</u>	<u>Pressure Unit Measure Code</u>
<u>Residual Pressure Rate</u>	<u>Static Pressure Head Rate</u>	<u>Water Source Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Flow Test Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water intake point**

OBJECT TYPE: **Point**

DEFINITION: **The location where water is allowed into the water distribution system.**

FEATURE ATTRIBUTES FOR: Water intake point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Water Source Type Code</u>	<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>
<u>Area Size Unit Measure Code</u>	<u>Water Source Area</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water junction point**

OBJECT TYPE: **Point**

DEFINITION: **A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.**

FEATURE ATTRIBUTES FOR: Water junction point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Manhole Type Code</u>	<u>Rim Dimension</u>	<u>Manhole Number of Valves Quantity</u>
<u>Manhole Number of Pipes Quantity</u>	<u>Model Number Code</u>	<u>Exterior Width Dimension</u>
<u>Length Dimension</u>	<u>Manhole Diameter Dimension</u>	<u>Material Composition Code</u>
<u>Invert Elevation Dimension</u>	<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Drain Type Code</u>	<u>Dimension Unit Measure Code</u>	<u>Manhole Air Relief Valve Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Water Junction Use Code</u>
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OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Water System**

FEATURE TYPE: **Water line**

OBJECT TYPE: **String/Chain**

DEFINITION: **A pipe used to carry a substance from location to location (main line, service line, vent line, etc).**

FEATURE ATTRIBUTES FOR: Water line

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>From X Coordinate</u>	<u>From Y Coordinate</u>
<u>From Z Coordinate</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>To X Coordinate</u>	<u>To Y Coordinate</u>	<u>To Z Coordinate</u>
<u>Unique Feature Identifier</u>	<u>Water Pumping Station Identifier</u>	<u>Water Source Identifier</u>
<u>Water Tank Identifier</u>	<u>Water Treatment Plant Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Model Number Code</u>	<u>Dimension Unit Measure Code</u>	<u>Elevation Unit Measure Code</u>
<u>Ground Elevation 1 Dimension</u>	<u>Ground Elevation 2 Dimension</u>	<u>Invert Elevation Node 1 Dimension</u>
<u>Pipe Cathodic Protection Code</u>	<u>Material Composition Code</u>	<u>Line Location Type Code</u>
<u>Length Dimension</u>	<u>Pipe Diameter Measure Code</u>	<u>Bottom Slope Percent</u>
<u>Slope Measure Unit Code</u>	<u>Marker Tape Code</u>	<u>Water Line Type Code</u>
<u>Invert Elevation Node 2 Dimension</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Maximum Pressure Rate</u>	<u>Narrative Text</u>
<u>Normal Pressure Rate</u>	<u>Pressure Unit Measure Code</u>	<u>Water Line Use Code</u>
<u>Water Source Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water marker point**

OBJECT TYPE: **Point**

DEFINITION: **A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.**

FEATURE ATTRIBUTES FOR: **Water marker point**

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>General Markers Type Code</u>	<u>Soil Consistency Code</u>	<u>Sign Width Dimension</u>
<u>Sign Text</u>	<u>Sign Material Composition Code</u>	<u>Sign Height Dimension</u>
<u>Pole Material Code</u>	<u>Pole Height Dimension</u>	<u>Pole Depth Dimension</u>
<u>Model Number Code</u>	<u>Dimension Unit Measure Code</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Rock Condition Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>	
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water meter point**

OBJECT TYPE: **Point**

DEFINITION: **A device installed in a line for measuring the quantity and or rate of water flowing to a facility or through a section of line.**

FEATURE ATTRIBUTES FOR: **Water meter point**

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>Water Junction Identifier</u>	<u>Water Line Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Water Meter Type Code</u>	<u>Service Code</u>	<u>Size Unit Measure Code</u>
<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>	<u>Model Number Code</u>
<u>Meter Dimension</u>	<u>Pump Station Type Code</u>	<u>Ground Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Water Source Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Customer Name</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water pressure reducing station point** OBJECT TYPE: **Point**

DEFINITION: **A station consists of a box/pit containing one or more pressure regulators and appurtenant shutoff valves and fittings.**

FEATURE ATTRIBUTES FOR: Water pressure reducing station point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>	<u>Unique Feature Identifier</u>
<u>Water Pumping Station Identifier</u>	<u>Water Regulator Reducer Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Station Dimension</u>	<u>Model Number Code</u>	<u>Ground Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Inlet Pressure Rate</u>	<u>Narrative Text</u>
<u>Normal Inline Pressure Rate</u>	<u>Outlet Maximum Pressure Rate</u>	<u>Pressure Unit Measure Code</u>
<u>Structure Condition Code</u>	<u>Water Source Code</u>	

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Constructed Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water pump point** OBJECT TYPE: **Point**

DEFINITION: **A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.**

FEATURE ATTRIBUTES FOR: Water pump point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>	<u>Unique Feature Identifier</u>
<u>Water Pumping Station Identifier</u>	<u>Water Source Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Water Pump Type Code</u>	<u>Total Dynamic Head Unit Measure Code</u>	<u>Serial Number Code</u>
<u>Centerline Dimension</u>	<u>Model Number Code</u>	<u>Ground Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>	<u>Cooling Method Code</u>	

PERFORMANCE:

<u>Actual Pump Capacity Volume</u>	<u>Disposition Code</u>	<u>Narrative Text</u>
<u>Power Generated Quantity</u>	<u>Power Required Code</u>	<u>Pump Capacity Rate</u>
<u>Rate Capacity Unit Measure Code</u>	<u>Total Dynamic Head Rate</u>	<u>Water Pump Use Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Priming Method Code</u>	<u>Priming Requirement Indicator Code</u>
<u>User Flag Text</u>		

FEATURE CLASS: **Water System**

FEATURE TYPE: **Water pump station site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.**

FEATURE ATTRIBUTES FOR: Water pump station site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Tributary Utility Subsystem Code</u>	<u>Unique Feature Identifier</u>	<u>Water Treatment Plant Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>	<u>Area Size Unit Measure Code</u>
<u>Station Area</u>	<u>Station Width Dimension</u>	<u>Water Pumping Station Type Code</u>
<u>Length Dimension</u>	<u>Station Dimension</u>	<u>Centerline Dimension</u>
<u>Nodal Elevation Dimension</u>	<u>Number of Pumps Quantity</u>	<u>High Water Dimension</u>
<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Output Capacity Volume</u>
<u>Rate Capacity Unit Measure Code</u>	<u>Structure Condition Code</u>	<u>Volume Unit Measure Code</u>
<u>Water Source Code</u>	<u>Water Source Name Code</u>	<u>Wet Well Capacity Volume</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Tank Alarm Dimension</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water rectifier point**

OBJECT TYPE: **Point**

DEFINITION: **A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the distribution system.**

FEATURE ATTRIBUTES FOR: Water rectifier point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Unique Feature Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Internal Meter Code</u>	<u>Enclosure Type Code</u>	<u>Cooling Method Code</u>
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PERFORMANCE:

<u>Current Output Amount</u>	<u>Current Unit Measure Code</u>	<u>Narrative Text</u>
<u>Number of Phases Quantity</u>	<u>Phase Letter Code</u>	<u>Voltage Input Code</u>
<u>Voltage Output Code</u>		

OPERATION/MAINTENANCE:

<u>User Flag Text</u>

FEATURE CLASS: **Water System**

FEATURE TYPE: **Water regulator reducer point**

OBJECT TYPE: **Point**

DEFINITION: **A pressure regulator automatically reduces the pressure on the downstream side of the valve to a preset magnitude.**

FEATURE ATTRIBUTES FOR: Water regulator reducer point

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Pipe Inlet Identifier</u>	<u>Pipe Outflow Identifier</u>	<u>Unique Feature Identifier</u>
<u>Water Junction Identifier</u>	<u>Water Pumping Station Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Water Regulator Reducer Type Code</u>	<u>Pipe Diameter Measure Code</u>	<u>Serial Number Code</u>
<u>Regulator Dimension</u>	<u>Model Number Code</u>	<u>Ground Elevation Dimension</u>
<u>Elevation Unit Measure Code</u>		

PERFORMANCE:

<u>Disposition Code</u>	<u>Inlet Pressure Rate</u>	<u>Narrative Text</u>
<u>Outlet Maximum Pressure Rate</u>	<u>Pressure Required Rate</u>	<u>Pressure Unit Measure Code</u>

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water reservoir area**

OBJECT TYPE: **G/GT Polygon**

DEFINITION: **A body of water which supplies water to a water distribution system.**

FEATURE ATTRIBUTES FOR: Water reservoir area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Permit Number Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Material Composition Code</u>	<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Elevation Unit Measure Code</u>	<u>Ground Elevation Dimension</u>	<u>Normal Head Dimension</u>
<u>Head Units Unit Measure Code</u>	<u>Invert Elevation Dimension</u>	<u>Elevation Level For 1st Pump/Valve Dimension</u>
<u>Interior Tank Area</u>	<u>Elevation Level Pumps Off Dimension</u>	<u>Top Elevation Dimension</u>
<u>Model Number Code</u>	<u>Perimeter Dimension</u>	<u>Perimeter Unit Measure Code</u>
<u>Serial Number Code</u>	<u>Tank Diameter Dimension</u>	<u>Length Dimension</u>
<u>Tank Style Code</u>	<u>Tank Width Dimension</u>	<u>Elevation Level For 2nd Pump/Valve Dimension</u>

PERFORMANCE:

<u>Capacity Volume</u>	<u>Disposition Code</u>	<u>High Pressure Rate</u>
<u>Low Pressure Rate</u>	<u>Narrative Text</u>	<u>Normal Pressure Rate</u>
<u>Overflow Dimension</u>	<u>Pressure Unit Measure Code</u>	<u>Volume Unit Measure Code</u>
<u>Water Tank Use Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Alarm Low Level Dimension</u>	<u>Alarm Low Level Dimension</u>
<u>Altitude Valve Code</u>	<u>Pressure Alarm Level Dimension</u>	<u>User Flag Text</u>

FEATURE CLASS: **Water System**

FEATURE TYPE: **Water source site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **The point from which the utility is supplied a product for processing and distribution.**

FEATURE ATTRIBUTES FOR: Water source site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Water Source Type Code</u>	<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>
<u>Area Size Unit Measure Code</u>	<u>Water Source Area</u>	

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water system flow direction arrow**

OBJECT TYPE: **Arrow**

DEFINITION: **A flow direction arrow indicates the direction of flow through a line, valve, or component.**

FEATURE ATTRIBUTES FOR: Water system flow direction arrow

DATABASE INTEGRATION:

PHYSICAL PROPERTIES:

PERFORMANCE:

OPERATION/MAINTENANCE:

FEATURE CLASS: **Water System**

FEATURE TYPE: **Water tank site**

OBJECT TYPE: **Point/Polygon**

DEFINITION: **An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.**

FEATURE ATTRIBUTES FOR: Water tank site

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Permit Number Identifier</u>	<u>Unique Feature Identifier</u>	<u>X Coordinate</u>
<u>Y Coordinate</u>	<u>Z Coordinate</u>	

PHYSICAL PROPERTIES:

<u>Material Composition Code</u>	<u>Area Size Unit Measure Code</u>	<u>Dimension Unit Measure Code</u>
<u>Elevation Unit Measure Code</u>	<u>Ground Elevation Dimension</u>	<u>Normal Head Dimension</u>
<u>Head Units Unit Measure Code</u>	<u>Invert Elevation Dimension</u>	<u>Elevation Level For 1st Pump/Valve Dimension</u>
<u>Interior Tank Area</u>	<u>Elevation Level Pumps Off Dimension</u>	<u>Top Elevation Dimension</u>
<u>Model Number Code</u>	<u>Perimeter Dimension</u>	<u>Perimeter Unit Measure Code</u>
<u>Serial Number Code</u>	<u>Tank Diameter Dimension</u>	<u>Length Dimension</u>
<u>Tank Style Code</u>	<u>Tank Width Dimension</u>	<u>Elevation Level For 2nd Pump/Valve Dimension</u>

PERFORMANCE:

<u>Capacity Volume</u>	<u>Disposition Code</u>	<u>High Pressure Rate</u>
<u>Low Pressure Rate</u>	<u>Narrative Text</u>	<u>Normal Pressure Rate</u>
<u>Overflow Dimension</u>	<u>Pressure Unit Measure Code</u>	<u>Volume Unit Measure Code</u>
<u>Water Tank Use Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>Alarm Low Level Dimension</u>	<u>Alarm Low Level Dimension</u>
<u>Altitude Valve Code</u>	<u>Pressure Alarm Level Dimension</u>	<u>User Flag Text</u>

FEATURE CLASS: **Water System**

FEATURE TYPE: **Water treatment plant area**

OBJECT TYPE: **G/GT Polygon**

DEFINITION: **A water treatment plant and all appurtenant equipment, buildings, and facilities relating to water treatment.**

FEATURE ATTRIBUTES FOR: Water treatment plant area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>Water Source Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Water Treatment Plant Type Code</u>	<u>Plant Width Dimension</u>	<u>Length Dimension</u>
<u>Plant Dimension</u>	<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>
<u>Number of Pumps Quantity</u>	<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Dimension Unit Measure Code</u>	<u>Bypass Code</u>	<u>Area Size Unit Measure Code</u>
<u>Plant Area</u>		

PERFORMANCE:

<u>Actual Plant Flow Volume</u>	<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>
<u>Narrative Text</u>	<u>Rated Flow Capacity Rate</u>	<u>Structure Condition Code</u>
<u>Water Source Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: Water System

FEATURE TYPE: Water treatment unit area

OBJECT TYPE: G/GT Polygon

DEFINITION: A water separation pond or other pool designed to allow solid material decomposition.

FEATURE ATTRIBUTES FOR: Water treatment unit area

DATABASE INTEGRATION:

<u>Facility Identifier</u>	<u>Graphic Feature Link</u>	<u>Metadata Identifier</u>
<u>Name Code</u>	<u>Unique Feature Identifier</u>	<u>Water Source Identifier</u>
<u>X Coordinate</u>	<u>Y Coordinate</u>	<u>Z Coordinate</u>

PHYSICAL PROPERTIES:

<u>Water Treatment Plant Type Code</u>	<u>Plant Width Dimension</u>	<u>Length Dimension</u>
<u>Plant Dimension</u>	<u>Perimeter Unit Measure Code</u>	<u>Perimeter Dimension</u>
<u>Number of Pumps Quantity</u>	<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>
<u>Dimension Unit Measure Code</u>	<u>Bypass Code</u>	<u>Area Size Unit Measure Code</u>
<u>Plant Area</u>		

PERFORMANCE:

<u>Actual Plant Flow Volume</u>	<u>Disposition Code</u>	<u>Flow Unit Measure Code</u>
<u>Narrative Text</u>	<u>Rated Flow Capacity Rate</u>	<u>Structure Condition Code</u>
<u>Water Source Code</u>		

OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water valve point**

OBJECT TYPE: **Point**

DEFINITION: **A fitting or device used for shutting or throttling flow through a line.**

FEATURE ATTRIBUTES FOR: Water valve point

DATABASE INTEGRATION:

<u>Branch Name Code</u>	<u>Facility Identifier</u>	<u>Graphic Feature Link</u>
<u>Metadata Identifier</u>	<u>Unique Feature Identifier</u>	<u>Water Junction Identifier</u>
<u>Water Line Identifier</u>	<u>X Coordinate</u>	<u>Y Coordinate</u>
<u>Z Coordinate</u>		

PHYSICAL PROPERTIES:

<u>Valve Style Code</u>	<u>Size Dimension</u>	<u>Valve Dimension</u>
<u>Size Unit Measure Code</u>	<u>Ground Elevation Dimension</u>	<u>Elevation Unit Measure Code</u>

PERFORMANCE:

<u>Disposition Code</u>	<u>Narrative Text</u>	<u>Water Valve Location Use Code</u>
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OPERATION/MAINTENANCE:

<u>Acquired Date</u>	<u>User Flag Text</u>
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FEATURE CLASS: **Water System**

FEATURE TYPE: **Water vent point**

OBJECT TYPE: **Point**

DEFINITION: **A valve installed in a line to either release air trapped in the line, and/or allow air into a line to relieve a vacuum condition.**

FEATURE ATTRIBUTES FOR: Water vent point

DATABASE INTEGRATION:

Facility Identifier

Graphic Feature Link

Metadata Identifier

Unique Feature Identifier

X Coordinate

Y Coordinate

Z Coordinate

PHYSICAL PROPERTIES:

PERFORMANCE:

Narrative Text

OPERATION/MAINTENANCE:

User Flag Text

Appendix C: Utilities Attributes

(Normative)

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Acquired Date		I		The date on which the subject item was originally acquired or purchased. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
Actual Plant Capacity Volume		R		The maximum treatment capacity of the water treatment plant when installation has been completed and it is operating under normal inflow and demand conditions.
Actual Plant Flow Rate		R		The measured peak flow rate of the water treatment plant when installation has been completed and it is operating under normal inflow and demand conditions.
Actual Plant Flow Volume		R		The measured peak treatment capacity of the water treatment plant when installation has been completed and it is operating under normal inflow and demand conditions.
Actual Pump Capacity Volume		R		The measured capacity of the pump operating under actual normal head and flow conditions.
Aerator Indicator Code	value list - boolean	C	16	Indicates whether or not the vault or lagoon has aerators. (yes/no)
Aerator Power Rating Amount		D		The power rating for the aerator, usually in terms of horse power (hp).
Alarm High Level Dimension		D		The elevation in the wetwell that triggers an alarm indicating no additional storage capacity.
Alarm Low Level Dimension		D		The elevation of the preset level in a tank (ground storage or supply tank) which indicates a dangerously low water level in the tank and turns off all pumps which draw water from the tank, in feet (English units) or meters (SI units) above some datum.
Altitude Valve Code	value list - boolean	C	16	Indicates whether or not the tank has an altitude valve which controls the flow into the tank? (yes or no).
Amp Rate		S		The maximum continuous current rating of the meter.
Analysis Date		I		Date on which water quality analyses were performed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
Anchor Attachment Type Text		C	15	The type of anchor attachment to the pole or tower.
Anchor Type Discriminator	discriminator - hcs anchor	C	16	Discriminator. This value differentiates similar entities by use or type.
Anchor Type Text		C	15	The type of anchor used with this guy.
Anode Weight		R		The initial weight of the anode or anode packet.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Area Size Unit Measure Code	unit of measure	C	16	The unit of measure for area.
Automatic Transfer Switch Code	value list - boolean	C	16	An indicator as to whether or not an automatic transfer switch exist. (yes or no) An automatic transfer switch is an electromechanical device used to automatically change states in the event of a power failure on the primary electrical service to use an
Average Depth Dimension		D		The average depth of containment measured from normal operating pool.
Average Drainage Lateral Slope Angle		D		The average slope of all drainage laterals.
Bank Armor Type Code	hydrography - bank armor lining	C	16	The type of channel armor used.
Base Elevation Dimension		D		The elevation of the discharge point of the downspout in feet (English units) or meters (SI units) above some datum.
Basic Insulation Level Rating Code	value list - BIL kv	C	16	The insulators basic insulation level rating.
Bedding Material Code	hydrography - bed material	C	16	The type of bedding material beneath the channel armor.
Booster Design Discriminator	discriminator - pump sta	C	16	Discriminator. The design of the pump/booster station.
Bottom Slope Percent		D		The slope of the bottom of the subject item expressed as a percentage.
Bottom Width Dimension		D		The bottom width of the armor measured along the base of the armor.
Branch Name Code		C	12	An operator generated identifier that is a unique site specific name or number designation of a branch or isolated area of a natural gas distribution system.
Bypass Code	value list - boolean	C	16	Indicates whether or not the treatment plant has a bypass line? (yes or no).
Cable Diameter Dimension		D		The nominal diameter of the cable.
Cable Diameter Unit Measure Code	unit of measure	C	16	The unit of measure of the diameter.
Cable Dimension Code	dimension list - electric cable	C	16	The cable dimension.
Cable Group Voltage Code	value list - voltage	C	16	The system voltage applied to the cable group.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Cable Installation Type Discriminator	discriminator - electric cable	C	16	Discriminator. This value differentiates similar entities by use or type.
Cable Length Dimension		D		The overall cable length.
Cable Material Code	material list - electric cable	C	16	The material composition of the cable.
Cable Mounting Configuration Type Code	type list - electric config	C	16	The cable mounting configuration on the pole or tower.
Cable Quantity		S		A number representing the total number of cables in the manhole. A cable passing through the manhole counts as one cable and a cable tying into another cable inside the manhole counts as one cable.
Cable Sheath Type Code	type list - sheath insulate	C	16	The type of cable sheathing or insulation.
Cable Tensile Force		D		The tensile force applied to the guy cable.
Cable Type Code	type list - electric cable	C	16	The type of cable connecting the devices.
Cable Type Discriminator	discriminator - electric cable	C	16	Discriminator. This value differentiates similar entities by use or type.
Cable Use Code	use list - electric cable	C	16	The use or purpose of the cable group.
Capacitor Voltage Code	value list - voltage	C	16	The system voltage across the capacitor.
Capacity Alarm Level Volume		D		Capacity alarm level.
Capacity Measure Code	unit of measure	C	16	The unit of measure for rate capacity data (e.g., gallons per minute).
Capacity Unit Measure Code	unit of measure	C	16	The unit of measure for capacity data (e.g., gallons).
Capacity Volume		D		Storage capacity of the subject item (e.g., gallons, ft3, etc).
Capped Code	value list - boolean	C	16	Indicates whether or not the pole is capped (yes/no).
Centerline Dimension		R		The elevation measured at centerline of the pump, in feet (English units) or meters (SI units) above some datum.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Channel Length Dimension		R		The overall length of the open channel.
Channel Reach Name		C	20	An operator generated identifier for the reach of an open channel.
Channel Style Code	style list - open channel	C	16	The style or geometric configuration of the channel
Circuit Number Amount		S		The total number of circuits that are being fed by the substation.
Classification Code	type list - pole classification	C	16	A classification of the pole diameter, and consequently the breaking strength, of wooden poles.
Complex Power Capacity Rate		C	12	The limit of the complex power which the demand meter can record.
Compressed Air System Fitting Code	discriminator - comp air fitting	C	16	The type of fitting used for the compressed air unit.
Connection Design Code	discriminator - fire connection	C	16	Discriminator. This value differentiates fire connections by use or type.
Constant Amount		I		The multiplication factor by which one must multiply the difference in present and previous meter readings to determine actual power consumed.
Constructed Date		I		The date on which the subject item construction was complete and user occupancy provided. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
Contents Descriptive Text		C	20	Separator contents
Control Centerline Dimension		D		The elevation at the centerline of the flow control device, in feet (English units) or meters (SI units) above some datum.
Control Type Code	type list - electric control	C	16	The method of adjusting the kilovar output of the capacitor.
Cooling Capacity Amount		R		The plant's rated capacity (e.g., tons), which signifies the peak constant cooling ability of the plant.
Cooling Capacity Unit Measure Code	unit of measure	C	16	The unit of measure for cooling capacity.
Cooling Method Code	method list - equipment cooling	C	16	The method by which the item is cooled.
Cooling Type Code	method list - equipment cooling	C	16	The type of method used for temperature control.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Cross Dikes Code	value list - boolean	C	16	An indicator whether cross dikes exists in the subject item or not (yes or no).
Current Output Amount		D		The output direct current from the rectifier to the anode system.
Current Unit Measure Code	unit of measure	C	16	The unit of measure used for the electrical current.
Customer Name		C	20	The name of the individual, company, or government agency served by the subject item.
Decibel Loss Quantity		D		Loss of a signal over a conductor expressed in decibels.
Depth Dimension		D		The depth below the ground surface or cover measured from the top of the subject item.
Description Code	type list - wastewater tank	C	16	This value differentiates similar entities by use or type.
Design Capacity Volume		D		The design flow capacity of the subject item.
Diameter Code	value list - pipe diameter	C	16	The manufacturer's nominal diameter.
Diameter Dimension		D		The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
Diameter Unit Measure Code	unit of measure	C	16	The unit of measure used for dimensions.
Digital Input Number Amount		I		The total number of digital-in ports on the device.
Digital Output Number Amount		I		The total number of digital-out ports on the device.
Dimension Unit Measure Code	unit of measure	C	16	The units of measure for the length.
Discharge Point Ground Dimension		D		The elevation of the ground surface at the discharge point, in feet (English units) or meters (SI units) above some datum.
Discriminator Tank Type Code	style list - tank	C	16	Discriminator: This value differentiates similar entities by use or type.
Disposal Description Text		C	30	Brief description of how the waste is disposed.
Disposition Code	disposition list - object	C	16	The status of the subject item (e.g., permanent, temporary, proposed, abandoned, etc.), from lists or entered from field inspections.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Distribution Box Code	value list - boolean	C	16	Indicates whether or not a distribution box exists for the subject item. (yes or no)
Distribution Box Invert Elevation Dimension		D		The invert elevation of the inside bottom of the distribution box.
Downspout Dimension		R		The length of the downspout, measured from highest point to its discharge point.
Drain Type Code	type list - drain	C	16	The type of subject item drain.
Drainage Basin Area		D		The size of the area, zone, or polygon in square units.
Drainage Design Discriminator	discriminator - open channel	C	16	Discriminator. This value differentiates similar entities by use or type.
Drainage Lateral Average Length Dimension		D		The mean or average length of the drainage laterals.
Drainage Lateral Total Length Dimension		D		The total (sum) length of all drainage laterals.
Drainage Pattern Code	hydrography - drainage pattern	C	16	The drainage pattern of the material surrounding the feature.
Drainage Pipe Material Texture Code	hydrography - drainage density	C	16	The texture of the material surrounding the feature.
Drying Bed Diameter Dimension		D		The inside diameter of the sludge bed, measured from the interior wall surface to the opposite interior wall surface.
Ductbank Size Code	size list - ductbank	C	16	A two dimensional description of the physical size of the ductbank including units of measure (e.g., 2 ft x 2 ft, 3 m x 3 m).
Ductbank Voltage Code	value list - voltage	C	16	The maximum voltage in the ductbank.
Ducts Quantity		S		An indicator of the number of conduits or wireways found in the ductbank.
Electric Meter Type Code	type list - electric meter	C	16	A label describing the features of the electrical system that the meter is measuring.
Electrical Capacitor Unit Measure Code	unit of measure	C	16	The unit of measure used for the electrical capacitor.
Electrical Ductbank Identifier		C	20	Foreign Key. An operator generated identifier used locally to identify a ductbank.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Electrical External Lighting Type Code	discriminator - external light	C	16	Discriminator - Various kinds of mounts for external lights.
Electrical Generator Type Code	type list - generator	C	16	Discriminator: This value differentiates similar entities by use or type.
Electrical Junction Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole for the subject utility.
Electrical Junction Use Code	discriminator - electric manhole	C	16	Discriminator. An attribute that differentiates the use of the subject item.
Electrical Meter Use Code	use list - electric device	C	16	An indication of the type of service the meter is monitoring.
Electrical Motor Type Code	type list - motor	C	16	A label representing the name of a certain category of motors in which the motor fits based on common features of construction with other motors in the same category.
Electrical Regulator Use Code	use list - electric device	C	16	An indication of whether the regulator is on a line or in a substation.
Electrical Substation Identifier		C	20	Foreign Key. An operator generated identifier locally used to identify the substation feeding this bus group.
Electrical Substation Type Code	type list - substation	C	16	A label indicating the type of service that the substation performs (e.g. distribution substation, facility substation).
Electrical Switch Rate		S		The maximum continuous amount of current to which the switch should be subjected.
Electrical Switch Type Code	type list - electric switch	C	16	A label chosen from a standard list of labels indicating the characteristics of a switch.
Electrical Switching Cubicle Identifier		C	20	A locally assigned switching cubicle number or designator.
Electrical Transformer Bank Identifier		C	20	Foreign Key. An operator generated identifier locally used to identify a specific transformer bank.
Electrical Transformer Vault Identifier		C	20	Foreign Key. An operator generated identifier locally used to identify a specific transformer vault.
Elevation Level For 1st Pump/Valve Dimension		D		The elevation of the preset level in a tank which activates one pump or one control valve which supplies water to the tank, in feet (English units) or meters (SI units) above some datum.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Elevation Level For 2nd Pump/Valve Dimension		D		The elevation of the preset level in a tank which activates a second pump, or control valve, which operates in conjunction with the first activated pump, or control valve, to supply water to the tank, in feet (English units) or meters (SI units) above some
Elevation Level Pumps Off Dimension		D		The elevation of the preset level in a tank which turns off the pump(s) or control valve(s) which supply water to the tank, in feet (English units) or meters (SI units) above some datum.
Elevation Unit Measure Code	unit of measure	C	16	The unit of measure for elevation, usually feet (ft) or meters (m).
Elevation Value Dimension		D		The elevation of the pressure regulator, measured at the regulator centerline.
Enclosure Type Code	type list - electric motor encl	C	16	The type of enclosure used to protect the feature.
End Date		I		The date the project was actually completed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
Energy Control Monitoring Cable Identifier		C	20	Foreign Key. Used to link to the cable table.
Energy Control Monitoring Ductbank Identifier		C	20	Foreign Key. An operator generated identifier used locally to identify a ductbank.
Energy Control Monitoring Junction Code	discriminator - emcs junc	C	16	The code that represents the type of Junction.
Engine Horsepower Code		S		The power rating of the prime mover of the generator in horsepower.
Engine Model Name		C	20	The engine Model, Product, Catalog, or Item Number.
Engine Serial Number Code		C	20	The engine serial number.
Expansion Loop Code	value list - boolean	C	16	The expansion loop of the heating and cooling system.
Exterior Width Dimension		D		The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
Facility Identifier		C	20	Foreign Key. Used to link the record to the Facility Record.
Facility Number Identifier		C	20	The organization specific identification code from Army's IFS-M, Air Force's WIMS, or Navy's Property Record Code Number.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Feature Name		C	12	The site specific identification name or number assigned to the subject item.
Feeder Number Text		C	20	An operator generated identifier locally used to identify the feeder to the transformer bank.
Field Drain Style Code	style list - drain field	C	16	The style of field drain system indicating the configuration and layout of the drain lines.
Fire Hydrant Classification Code	class list - fire hydrant	C	16	The hydrant classification according to their rated capacity according to the National Fire Protection Association.
First Transformer Capacity Volume		I		The capacity of the first transformer contained in the transformer bank. Used exclusively for displaying the capacities in the bank.
Fitting Depth Dimension		D		The depth below the ground surface or cover measured from the top of the subject item.
Fitting Diameter Dimension		D		The inside, or interior, diameter of the fitting.
Fitting Dimension		D		The elevation measured at centerline of the fitting, in feet (English units) or meters (SI units) above some datum.
Fitting Length Dimension		D		The overall length of the fitting.
Fitting Width Dimension		D		The width dimension of the subject item measured at its' widest point.
Fixture Height Dimension		D		The height of the fixture above a given reference, usually the grounds surface.
Fixture Use Code	use list - gas fixture	C	16	The use or purpose of the gas fixture.
Flood Area		D		Flood flow area
Flood Depth Dimension		D		The average depth of the specific flood.
Flood Dimension		D		The average flood elevation.
Flood Flow Rate		D		The flow rate of the flood based on the flow elevation.
Flood Frequency Amount		D		The statistical reoccurring frequency of the flood measured in years up to the probable maximum flood (PMF). Typical values are 5-yr, 10-yr, 25-yr, 50-yr, 100-yr, 500-yr, etc.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Flood Zone Local Name Code	hydrography - drainage zone	C	16	Local name of assigned hydrographic drainage zones.
Flow Capacity Volume		D		The flow capacity of the subject item.
Flow Rate		D		The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
Flow Test Date		I		The date of the last fire flow test conducted at the subject fire hydrant or fire department connection. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
Flow Unit Measure Code	unit of measure	C	16	The unit of measure for rate capacity data (e.g., gallons per minute).
Flow Width Dimension		D		The top flow width.
Frame Type Configuration Code	type list - substation frame	C	16	The substation structural frame configuration.
Frequency Unit Measure Code	unit of measure	C	16	The unit of measure for frequency.
From X Coordinate		D		The x component of individual beginning coordinate point.
From Y Coordinate		D		The y component of individual beginning coordinate point.
From Z Coordinate		D		The z component of individual beginning coordinate point.
Fuel Anode Test Station Type Code	type list - anode test station	C	16	The type of anode test station configuration use.
Fuel Fitting Type Code	type list - fitting	C	16	A discriminator indicating the kind, class, or group of the subject item.
Fuel Gas Source Code	source list - fuel gas	C	16	The source of fuel for the subject item.
Fuel Junction Identifier		C	20	Foreign Key. An operator generated identifier used to locally identify the subject item.
Fuel Junction Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole for the subject utility.
Fuel Junction Use Code	discriminator - fuel manhole	C	16	Discriminator. An attribute that differentiates the use of the subject item.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Fuel Line Identifier		C	20	Foreign Key. An operator generated identifier of the utility line pipe to which the subject item is connected. Pipe_id represents the unique site specific numerical designation assigned to each section of pipe in a utility system (e.g., water, gas, sewer), interconnected by
Fuel Line Type Code	type list - pipe	C	16	A discriminator indicating the kind, class, or group of the subject item.
Fuel Line Use Code	discriminator - fuel pipe	C	16	Discriminator. This value differentiates similar entities by use or type.
Fuel Meter Type Code	type list - fuel meter	C	16	A discriminator indicating the kind, class, or group of the subject item.
Fuel Oil & Water Separator Type Code	type list - oil/water separator	C	16	A discriminator indicating the kind, class, or group of the subject item.
Fuel Pump Booster Station Identifier		C	20	Foreign Key. Used to link the record to an associated station (pump station, pressure reducing station).
Fuel Pump Booster Station Type Code	discriminator - pump sta	C	16	The type of station.
Fuel Pump Identifier		C	20	Foreign Key. A unique, user defined identifier for each record or instance of an entity.
Fuel Pump Use Code	use list - pump	C	16	The particular application, or use the subject item.
Fuel Regulator Reducer Type Code	discriminator - regulator	C	16	A discriminator indicating the kind, class, or group of the subject item.
Fuel Source Code	source list - fuel gas	C	16	The source of fuel for the pumps.
Fuel System Source Identifier		C	20	Foreign Key. Used to link the fuel pipe record to an optional source.
Fuel System Source Type Code	type list - fuel source	C	16	A discriminator indicating the kind, class, or group of the subject item.
Fuel Tank Identifier		C	20	Foreign Key. An operator generated identifier used to locally identify the subject item.
Fuel Tank Use Code	use list - tank	C	16	The particular kind or use of the tank.
Fuel Type Code	type list - fuel gas	C	16	The type of fuel or gas dispensed, carried, used or otherwise handled by the subject item.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Fuel Valve Identifier		C	20	Foreign Key. The unique site specific identification name or number of a valve associated with or connected to the subject item.
Fuel Valve Use Code	use list - valve	C	16	The site specific use of the valve.
Fuse Rate Quantity		S		The current rating of the fuse protecting the regulator. This will be on the primary side.
Fuse Type Code	type list - electric switch	C	16	A label chosen from a standard list of labels describing the characteristics of the fuse.
Gate Class Type Code	style list - gates	C	16	The particular kind, class, or group of gate.
Gate Code	discriminator - culvert	C	16	Discriminator. The type of gate.
Gate Width Dimension		D		The width dimension of the subject item, measured from opposite inside faces.
General Markers Type Code	type list - utility	C	16	A discriminator indicating the kind, class, or group of the subject item.
General Pole & Tower Location Code	type list - pole/tower	C	16	A discriminator indicating the kind, class, or group of the subject item.
General Pole & Tower Location Identifier		C	20	Foreign Key. An operator generated identifier used to uniquely identify the subject item.
General Utilities Area		D		The size of the area, zone, or polygon in square units.
Generator Complex Power Rate		S		The rating of the complex power that the generator creates.
Generator Hertz Rating Code	value list - hertz	C	16	The frequency of the electrical signal that the generator creates.
Generator Number of Phases Quantity		S		The number of phases to which this device provides reactive power.
Generator Real Power Rate		S		The rating of the real power that the generator creates.
Generator Voltage Code	value list - voltage	C	16	The potential of the electrical energy that the generator creates.
Grade Unit Measure Code	unit of measure	C	16	The unit of measure for grade.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Graphic Feature Link		I		Graphic Key. A system-generated integer that is used to link the record to graphic entities. Do not populate this field.
Grit Chamber Storage Capacity Volume		R		The grit chamber overall storage capacity.
Grit Chamber Type Code	value list - boolean	C	16	An indicator as to whether or not the subject item has a grit chamber. (yes or no)
Grit Chamber Storage Capacity Volume		R		The grit chamber overall storage capacity.
Grit Type Code		C	12	The predominate type of grit collected in the grit chamber.
Ground Elevation 1 Dimension		D		The elevation of the ground surface at node_id_1, in feet (English units) or meters (SI units) above some datum.
Ground Elevation 2 Dimension		D		The elevation of the ground surface at node_id_2, in feet (English units) or meters (SI units) above some datum.
Ground Elevation Dimension		D		The elevation of the ground surface in feet (English units) or meters (SI units) above some datum.
Grounded Code	value list - boolean	C	16	An indicator as to whether or not the pole is grounded. (yes or no)
Group Conductor Quantity		S		The total number of ungrounded conductors in the cable.
Group Conductor Size Code	dimension list - electric cable	C	16	The size of a single ungrounded conductor in the cable group in American Wire Gauge (AWG) units.
Group Insulation Material Code	type list - sheath insulate	C	16	The type of material with which the conductors are insulated from each other and from their surroundings.
Group Material Composition Code	material list - electric bus	C	16	The material composition of the electrical bus group.
Group Neutral Conductor Size Code	dimension list - electric cable	C	16	The size of a single neutral conductor in American Wire Gauge (AWG) units.
Group Number of Neutral Conductors Quantity		S		The total number of grounded conductors in a ductbank.
Group Number of Phases Quantity		S		The number of phases routed by this cable group.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Group Reactance Amount		R		The reactance of the bus provided by the manufacturer.
Group Resistance Amount		R		The resistance of the bus provided by the manufacturer.
Group Voltage Code	value list - voltage	C	16	The voltage of the bus group.
Guy Design Discriminator	discriminator - utility guy	C	16	Discriminator. This value differentiates similar entities by use or type.
Guy Type Code	type list - utility guy	C	16	The configuration of the guy construction.
Head Units Unit Measure Code	unit of measure	C	16	The unit of measure for pressure head.
Heating and Cooling Anode Test Station Type Code	type list - anode test station	C	16	The type of anode test station configuration use.
Heating and Cooling Fitting Location Type Code	discriminator - hcs fitting	C	16	A discriminator indicating the kind, class, or group of the subject item.
Heating and Cooling Junction Identifier		C	20	Foreign Key. An operator generated identifier used to locally identify the subject item.
Heating and Cooling Junction Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole for the subject utility.
Heating and Cooling Junction Use Code	discriminator - h/c manhole	C	16	Discriminator. An attribute that differentiates the use of the subject item.
Heating and Cooling Meter Location Type Code	type list - water meter	C	16	A discriminator indicating the kind, class, or group of the subject item.
Heating and Cooling Pipe Identifier		C	20	Foreign Key. An operator generated identifier of the utility line pipe to which the subject item is connected. Pipe_id represents the unique site specific numerical designation assigned to each section of pipe in a utility system (e.g., water, gas, sewer), interconnected by
Heating and Cooling Pipe Location Type Code	type list - pipe	C	16	A discriminator indicating the kind, class, or group of the subject item.
Heating and Cooling Pipe Location Use Code	discriminator - hcs pipe	C	16	Discriminator. This value differentiates similar entities by use or type.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Heating and Cooling Plant Identifier		C	20	Foreign Key. The site specific unique identification name or number of the energy plant.
Heating and Cooling Plant Type Code	discriminator - hcs plant	C	16	A discriminator indicating the kind, class, or group of the subject item.
Heating and Cooling Pump Use Code	use list - pump	C	16	The particular application, or use the subject item.
Heating and Cooling Regulator Type Code	type list - regulator	C	16	The kind, class, or group of the subject item.
Heating and Cooling Valve Use Code	discriminator - valve	C	16	The site specific use of the valve.
Heating Capacity Amount		R		The plant's rated capacity (e.g. boiler_hp), which signifies the peak constant heating ability of the plant.
Heating Capacity Unit Measure Code	unit of measure	C	16	The unit of measure for heating capacity.
Height Dimension	unit of measure	C	16	The unit of measure for height.
High Pressure Rate		D		The preset high, or maximum, operating pressure setting of a tank. For a hydropneumatic (i.e., pressure) type tank this is the setting at which all pumps supplying water to the tank, and all air compressors supplying compressed air to the tank, are off.
High Water Dimension		D		The high water or overflow elevation of the storage tank at the pumping station, in feet (English units) or meters (SI units) above some datum.
Horsepower Rate		D		The output power rating of the motor in units of horsepower.
Horsepower Unit Measure Code	unit of measure	C	16	The unit of measure for horse power.
Hydrant Design Discriminator	discriminator - hydrant	C	16	Discriminator. This value differentiates similar entities by use or type.
Hydrant Dimension		D		The elevation of the hydrant, measured at the hydrant outlet, in feet (English units) or meters (SI units) above some datum.
Hydrant Measure Type Code	type list - diameter measure	C	16	This attribute provides information concerning the basis for the subject item's inlet and outlet dimensions (e.g., inside diameter, outside diameter, nominal).

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Hydrant Outlet 1 Diameter Dimension		D		The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of one of the hydrant outlets.
Hydrant Required Fire Flow Rate		D		The code or regulation required fire flow rate from a fire hydrant or fire flow connection.
Hydrant Size Unit Measure Code	unit of measure	C	16	The unit of measure for size.
Hydrant Type Code	type list - hydrant	C	16	The particular kind, class, or group of hydrant.
Hydrographic Drainage Zone Code	hydrography - drainage zone	C	16	Local name of assigned hydrographic drainage zones.
Impedance Measure Amount		D		The overall device resistance measured in ohms.
Impedance Unit Measure Code	unit of measure	C	16	The unit of measure for impedance.
Industrial Waste Fitting Location Type Code	discriminator - waste fitting	C	16	A discriminator indicating the kind, class, or group of the subject item.
Industrial Waste Junction Identifier		C	20	Foreign Key. An operator generated identifier use to locally identify the subject item.
Industrial Waste Junction Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole for the subject utility.
Industrial Waste Junction Use Code	discriminator - ind wast manhole	C	16	Discriminator. An attribute that differentiates the use of the subject item.
Industrial Waste Lagoon Type Code	type list - lagoon	C	16	A discriminator indicating the kind, class, or group of the subject item.
Industrial Waste Lagoon Use Code	value list - boolean	C	16	An indicator as to whether or not the lagoon is used for industrial wastewater. (yes or no)
Industrial Waste Line Identifier		C	20	Foreign Key. An operator generated identifier of the utility line pipe to which the subject item is connected. Pipe_id represents the unique site specific numerical designation assigned to each section of pipe in a utility system (e.g., water, gas, sewer), interconnected by
Industrial Waste Line Type Code	type list - pipe	C	16	A discriminator indicating the kind, class, or group of the subject item.
Industrial Waste Line Use Code	discriminator - wastewater line	C	16	Discriminator. This value differentiates similar entities by use or type.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Industrial Waste Meter Location Type Code	type list - water meter	C	16	A discriminator indicating the kind, class, or group of the subject item.
Industrial Waste Neutralizer Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole/pit for the subject utility.
Industrial Waste Oil & Water Separator Code	type list - oil/water separator	C	16	A discriminator indicating the kind, class, or group of the subject item.
Industrial Waste Pump Identifier		C	20	Foreign Key. A unique, user defined identifier for each record or instance of an entity.
Industrial Waste Pump Type Code	type list - pump	C	16	A discriminator indicating the kind, class, or group of the subject item.
Industrial Waste Pump Use Code	use list - pump	C	16	The particular application, or use of the subject item.
Industrial Waste Pumping Station Ejector Identifier		C	20	Foreign Key. Used to link the record to an associated station (pump station, pressure reducing station).
Industrial Waste Pumping Station Ejector Type Code	type list - station	C	16	A discriminator indicating the kind, class, or group of the subject item.
Industrial Waste Tank Identifier		C	20	Foreign Key. An operator generated identifier used to locally identify the subject item.
Industrial Waste Tank Use Code	use list - tank	C	16	The particular kind or use of the industrial waste water tank.
Industrial Waste Treatment Plant Code	type list - treatment plant	C	16	A discriminator indicating the kind, class, or group of the subject item.
Industrial Waste Treatment Plant Identifier		C	20	Foreign Key. The site specific unique identification name or number of the treatment plant.
Industrial Waste Valve Use Code	use list - valve	C	16	The particular application, or use the subject item.
Industrial Waste Water Discharge Code	type list - effluent discharge	C	16	A discriminator indicating the kind, class, or group of the subject item.
Industrial Waste Water Discharge Identifier		C	20	Foreign Key. An operator generated identifier used locally to reference the discharge identification for the subject item.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Inlet Diameter Dimension		D		The diameter of the hydrant inlet connection.
Inlet Gas Line Pressure Rate		D		The design gas system pressure in the line on inlet side of the pressure regulator.
Inlet Pressure Rate		D		The design fuel system pressure in the line on inlet side of the pressure regulator.
Inlet Step Domain Discriminator	discriminator - inlets	C	16	Discriminator. This value differentiates similar entities by use or type.
Inlet Style Code	style list - inlet	C	16	Discriminator: This value differentiates similar entities by use or type.
Input Voltage Code	value list - voltage	C	16	The input AC voltage to the rectifier.
Inside Width Dimension		D		The width dimension of the subject item, measured from opposite inside faces.
Installation Date		I		The date on which the subject item was originally installed. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915).
Installation Type Code	discriminator - installation	C	16	Discriminator. This value differentiates similar entities by use or type.
Insulation Classification Code	type list - electric motor insul	C	16	The classification of the motor's insulation.
Insulation Type Code	type list - sheath insulate	C	16	The type of insulation covering the conductor.
Interior Diameter Dimension		D		The inside, or interior, diameter of the fitting.
Interior Tank Area		D		The interior surface area of the tank.
Internal Meter Code	value list - boolean	C	16	An indicator as to whether or not the rectifier has an internal meter, yes/no.
Invert Elevation Average Dimension		D		The average elevation at the bottom of the lagoon or reservoir.
Invert Elevation Dimension		D		The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
Invert Elevation Node 1 Dimension		D		The elevation of the bottom of the item at node_id_1 in feet (English units) or meters (SI units) above some datum.
Invert Elevation Node 2 Dimension		D		The elevation of the bottom of the item at node_id_2 in feet (English units) or meters (SI units) above some datum.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Item Condition Code	condition list - object	C	16	The condition of the subject item when last inspected.
Junction Status Code	status list - manhole	C	16	The status of the manhole indicating its' usability.
Laboratory Name Code	name list - laboratory	C	16	The name of the laboratory primarily responsible for completing the required tests for the subject item.
Laboratory Type Code	type list - laboratory	C	16	The type of the laboratory primarily responsible for completing the required tests for the subject item.
Lagoon Area		D		The overall surface measurement within the limits of the lagoon facility (e.g., within fence or building).
Lagoon Pipe Outlet Code	value list - boolean	C	16	An indicator as to whether or not the lagoon has pipe outlets. (yes or no)
Lagoon Width Dimension		D		The average width dimension of the lagoon, measured from top of opposite side slopes.
Last Inspection Date		I		Date of last inspection or modification of the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
Laterals Average Diameter Dimension		D		The average diameter of all drainage laterals
Laterals Diameter Unit Measure Code	unit of measure	C	16	The unit of measure for the laterals diameter length.
Laterals Total Diameter Dimension		D		The total diameter of all drainage laterals
Length Dimension		R		The overall length of the armor protection.
Length Unit Measure Code	unit of measure	C	16	The unit of measure for length.
Line Location Type Code	type list - pipeline location	C	16	The location of the pipeline in relevance to the earth's surface.
Lined Code	value list - boolean	C	16	An indicator as to whether the pipe is lined or not (yes/no).
Liner Type Code	type list - manhole liner	C	16	The type of liner used if the pit/manhole is used for neutralizing chemicals.
Loose Buffered Indicator Code	value list - boolean	C	16	An indicator as to whether or not the cable is loose buffered (yes/no).

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Low Pressure Rate		D		The preset low, or minimum, operating pressure setting of a tank. For a hydropneumatic (i.e., pressure) type tank this is the setting which activates the pump(s) supplying water to the tank. For an elevated type tank, this is the setting which activates
Managing Agency Code		C	15	The regulator agency that monitors inflow, containment, and discharge for the subject item.
Managing Office Code		C	12	The managing office/organization.
Manhole Accessible Boolean Value Code	value list - boolean	C	16	An indication as to whether or not is part of a manhole or has access via a manhole (yes/no).
Manhole Air Relief Valve Code	value list - boolean	C	16	Indicates whether or not there is an air relief valve installed on subject item? (yes/no)
Manhole Diameter Dimension		D		The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
Manhole Floor Elevation Dimension		D		The height (or depth) of the bottom of the manhole measured from grade.
Manhole Liner Type Code	type list - manhole liner	C	16	The type of liner used if the pit/manhole is used for neutralizing chemicals.
Manhole Neutralization Agent Name		C	30	The chemical agent in the pit which chemically neutralizes the in stream reactant.
Manhole Number of Pipes Quantity		S		The number of the pipes entering and exiting the subject item.
Manhole Number of Valves Quantity		S		The number of valves inside the subject item.
Manhole Reactance Amount		C	30	The chemical in the incoming waste stream being neutralized.
Manhole Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole for the subject utility.
Manufacture Date		I		The date of manufacturer for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
Manufacturer Name		C	20	Foreign Key. An operator generated identifier used to identify the item manufacturer.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Marker Tape Code	value list - boolean	C	16	Location marker tape or wire is installed above underground pipe to facilitate locating with a magnetometer? (yes or no).
Material Code	material list - pipe	C	16	An indication of the type of material of which the duct is composed.
Material Composition Code	material list - pipe	C	16	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
Material Value Code	material list - pipe	C	16	The material composition of the subject item, such as wood, concrete, steel, cast iron, plastic, etc.
Maximum Continuous Power Rate		R		The maximum continuous amount of complex power that the substation can provide.
Maximum Grade Angle		D		The maximum or steepest grade in the drainage basin.
Maximum Outlet Design Pressure Rate		D		The design or maximum system pressure in the line on outlet side of the pressure reducing station.
Maximum Pressure Rate		D		The manufacturer's or industry standard's maximum pressure rating of the subject item.
Maximum Temperature		D		The manufacturer's or industry standard's maximum temperature rating of the subject item.
Mean Flow Cross Section Dimension		R		The cross section area of the mean flow for the open channel.
Mean Flow Dimension		D		The elevation of the mean flow above a specific datum.
Mean Flow Rate		D		The mean or average flow rate for the open channel.
Mean Grade Angle		D		The average grade in the drainage basin.
Measure Pressure Rate		D		The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection.
Measure Type Code	type list - diameter measure	C	16	This attribute provides information concerning the basis for the subject item's inlet and outlet dimensions (e.g., inside diameter, outside diameter, nominal).
Measured Outflow Volume		R		The actual measured pump flow output.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Metadata Identifier		C	20	Foreign Key. Used to link the record to the applicable feature level metadata record(s).
Meter Design Discriminator	discriminator - waste meter	C	16	Discriminator: The design of the water meter.
Meter Dimension		D		The elevation at the centerline of the meter, in feet (English units) or meters (SI units) above some datum.
Meter Hertz Rating Code	value list - hertz	C	16	The frequency of the electrical system on which the meter should be used.
Meter Number of Phases Quantity		S		The number of phases that the meter monitors.
Meter Real Power Rate		S		The power rating on the meter based on the current and potential transformer ratios.
Meter Voltage Code	value list - voltage	C	16	The potential of the electrical system on which the meter may be used.
Minimum Grade Angle		D		The minimum or shallowest grade in the drainage basin.
Model Number Code		C	12	The Model, Product, Catalog, or Item Number of subject item.
Monitoring Agency Name		C	15	The regulator agency that monitors inflow, containment, and discharge for the subject item.
Monitoring Device Identifier		C	20	Foreign Key. Used to link to the control device table.
Monitoring Device Type Discriminator	discriminator - ecm device	C	16	Discriminator: This value differentiates similar entities by use or type.
Motor Hertz Rating Code	value list - hertz	C	16	The nameplate frequency rating of the motor.
Motor Number of Phases Quantity		S		The number of phases at which the motor was designed to operate.
Motor Voltage Code	value list - voltage	C	16	The nameplate voltage rating of the motor.
Mounting Type Code	discriminator - electric tranbnk	C	16	Discriminator. The type of mounting for the transformer bank.
Name Code	name list - fuel source	C	16	The site specific identification name or number assigned to the subject item.
Narrative Text		C	240	A description or other unique information concerning the subject item, limited to 240 characters.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Natural Gas Anode Test Station Type Code	type list - anode test station	C	16	The type of anode test station configuration use.
Natural Gas Fitting Type Code	discriminator - gas/wat fitting	C	16	A discriminator indicating the kind, class, or group of the subject item.
Natural Gas Junction Identifier		C	20	Foreign Key. An operator generated identifier use to locally identify the subject item.
Natural Gas Junction Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole for the subject utility.
Natural Gas Junction Use Code	discriminator - nat gas manhole	C	16	Discriminator. An attribute that differentiates the use of the subject item.
Natural Gas Light Type Code	type list - gas fixture	C	16	The type of fixture.
Natural Gas Line Identifier		C	20	Foreign Key. An operator generated identifier of the utility line pipe to which the subject item is connected. Pipe_id represents the unique site specific numerical designation assigned to each section of pipe in a utility system (e.g., water, gas, sewer), interconnected by
Natural Gas Line Type Code	type list - pipe	C	16	A discriminator indicating the kind, class, or group of the subject item.
Natural Gas Line Use Code	discriminator - natural gas pipe	C	16	Discriminator. This value differentiates similar entities by use or type.
Natural Gas Meter Type Code	type list - gas meter	C	16	A discriminator indicating the kind, class, or group of the subject item.
Natural Gas Pump Identifier		C	20	Foreign Key. A unique, user defined identifier for each record or instance of an entity.
Natural Gas Pump Type Code	type list - pump	C	16	A discriminator indicating the kind, class, or group of the subject item.
Natural Gas Pump Use Code	use list - pump	C	16	The particular application, or use the subject item.
Natural Gas Pumping Station Identifier		C	20	Foreign Key. Used to link the record to an associated station (pump station, pressure reducing station).
Natural Gas Pumping Station Type Code	discriminator - gas pump sta	C	16	The type of station.
Natural Gas Regulator Reducer Type Code	discriminator - regulator	C	16	A discriminator indicating the kind, class, or group of the subject item.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Natural Gas Source Identifier		C	20	Foreign Key. An operator generated identifier identifying name or number of the gas/fuel source.
Natural Gas Source Type Code	type list - fuel gas	C	16	A discriminator indicating the kind, class, or group of the subject item.
Natural Gas Tank Identifier		C	20	Foreign Key. An operator generated identifier used to locally identify the subject item.
Natural Gas Tank Use Code	use list - tank	C	16	The particular kind or use of the tank.
Natural Gas Valve Identifier		C	20	Foreign Key. The unique site specific identification name or number of a valve associated with or connected to the subject item.
Natural Gas Valve Use Code	discriminator - gas valve	C	16	The site specific use of the valve.
Neutralization Agent Name		C	30	The chemical agent in the pit which chemically neutralizes the in stream reactant.
Nodal Elevation Dimension		R		The elevation of subject node, which is used in performing computer analyses of the water distribution system. The node elevation is usually the ground elevation at the subject node, or the elevation of the subject item located at the subject node (e.g.,
Nominal Cooling Pressure Rate		R		The nominal chilled water pressure leaving the plant.
Nominal Cooling Water Temperature		R		The nominal chilled water temperature leaving the plant.
Nominal Heating Pressure Rate		R		The nominal hot water or steam pressure leaving the plant.
Nominal Hot Water Temperature		R		The nominal hot water temperature leaving the plant.
Normal Continuous Power Capacity Rate		S		The normal continuous amount of complex power that the substation provides.
Normal Head Dimension		D		The normal operating head for the subject item.
Normal Inline Pressure Rate		D		The normal operating pressure within a pipe on the inline side of a station.
Normal Operating Head Dimension		D		The normal operating head for the subject item.
Normal Positioning Code	status list - electric switch	C	16	The positional condition of a switch during normal circuit conditions (e.g., normally-open, normally closed).

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Normal Pressure Rate		D		The normal operating pressure of the subject item.
Normal Temperature		D		The normal operating temperature of the subject item.
Number 1 Capacity Value Code	value list - electric kvar	C	16	The capacity of each transformer in a group. (i.e. 2-50kva / 1-25kva, 50 is the capacity of each transformer in the first group - 25 is the capacity of each transformer in the second group.) There can be no more than two groups in a bank.
Number 2 Capacity Value Code	value list - electric kvar	C	16	The capacity of each transformer in a group. (i.e. 2-50kva / 1-25kva, 50 is the capacity of each transformer in the first group - 25 is the capacity of each transformer in the second group.) There can be no more than two groups in a bank.
Number of Analog Inputs Amount		I		The total number of analog-in ports on the device.
Number of Analog Outputs Amount		I		The total number of analog-out ports on the device.
Number of Floods Quantity		S		The total number of floods recorded for this channel.
Number of Inlet Pipes Quantity		S		The number of pipes discharging into the subject item.
Number of Laterals Quantity		S		The total number of laterals.
Number of Links Quantity		S		Number of links in the cable.
Number of Outlet Pipes Quantity		S		The number of pipes carrying material/fluid out of the subject item.
Number of Phases Quantity		S		The number of phases to which this device provides reactive power.
Number of Pipes In Quantity		S		The number of pipes discharging into the subject item.
Number of Pipes Out Quantity		S		The number of pipes carrying material/fluid out of the subject item.
Number of Pipes Quantity		S		The number of the pipes entering and exiting the subject item.
Number of Pumps Quantity		S		The total number of pumps located at the subject item.
Number of Spares Quantity		S		The number of spare ducts enclosed in the ductbank for future use.
Number of Switches Quantity		S		The number of switches at this installation. Each switch has its own record.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Number of Taps Quantity		S		The number of available points of connection on the regulator which may be used to change the voltage.
Number of Terminal's Quantity		I		The total number of terminal connections at the test station.
Number of Terminals Quantity		I		The total number of terminal connections at the test station.
Number of Transformers in First Group Quantity		S		The number of transformers in the first group.
Number of Transformers Quantity		S		The total number of transformers presently in use at the substation.
Number of Twisted Pairs Quantity		S		The number of twisted pair linked to the device.
Number of Valves Quantity		S		The number of valves inside the subject item.
Oil & Water Separator Area		D		The size of the area, zone, or polygon in square units.
Oil & Water Separator Code		C	2	The oil-water separator code. Usually defined as OW.
Oil Capacity Volume		D		The manufacturer recommended amount of oil that the generator engine requires to operate properly.
Oil-Water Separator Code	value list - boolean	C	16	An indicator as to whether or not grit chamber has an integrated oil-water separator. (yes or no)
Optimum Operating Temperature		D		The optimum operating temperature for the subject item.
Outlet 1 Diameter Dimension		D		The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of the largest hydrant outlet.
Outlet 2 Diameter Dimension		D		The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of the second largest hydrant outlet.
Outlet 3 Diameter Dimension		D		The diameter of the hydrant outlet, or for hydrants with more than one outlet, the diameter of the smallest hydrant outlet.
Outlet Control Identifier		C	12	The outlet control.
Outlet Control Name		C	12	The outlet control.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Outlet Gas Line Maximum Operating Pressure Rate		D		The design or maximum system pressure in the line on outlet side of the pressure reducing station.
Outlet Gas Line Maximum Pressure Rate		D		The design or maximum system pressure in the line on outlet side of the pumping station.
Outlet Maximum Pressure Rate		D		The design water system pressure in the waterline on outlet side of the pressure regulator.
Output Capacity Rate		R		The pump station's output capacity (e.g., gpm) rating (with all pumps operating) at a specific total dynamic head (TDH), which correlates to normal system pressure head or design pressure head.
Output Capacity Volume		D		The pump station's output capacity (e.g., gpm) rating (with all pumps operating) at a specific total dynamic head (TDH), which correlates to normal system pressure head or design pressure head.
Overflow Dimension		D		The elevation measured at the point of overflow, or entrance, into the tank overflow pipe., in feet (English units) or meters (SI units) above some datum.
Percentage Slope Left Channel Dimension		D		The slope of the left channel side expressed as a percentage.
Percentage Slope Right Channel Dimension		D		The slope of the right channel side expressed as a percentage.
Percentage Tapped Amount		D		The percentage of the voltage that will be changed by moving the connection up or down one tap.
Perimeter Dimension		D		The distance around the boundary of the area, zone, or subject item in linear units.
Perimeter Unit Measure Code	unit of measure	C	16	The unit of measure for length.
Permit Expiration Date		I		The date the current permit expires for the subject item. Format for date is YYYYMMDD (i.e., September 15, 1994 = 19940915)
Permit Number Identifier		C	28	The unique site specific permit number issued from the regulating agency for operation or construction of the item.
Phase Letter Code	type list - electric phase	C	16	The letter(s) of the phase(s) for the subject item.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Phase Number for Group Two Value Code	type list - electric phase	C	16	The phase number for the second transformer group.
Phase Number Value Code	type list - electric phase	C	16	The phase number for the first transformer group.
Pipe Cathodic Protection Code	value list - boolean	C	16	Indicates whether or not the pipe has been provided with cathodic protection? (yes or no).
Pipe Diameter Measure Code	value list - pipe diameter	C	16	The manufacturer's designated size, or nominal (i.e., rounded to the nearest unit) diameter for the subject item (e.g., 1" gas hydrant, 2" meter, 6" pipe).
Pipe Inlet Identifier		C	20	Foreign Key. An operator generated identifier of the utility line pipe to which the subject item is connected.
Pipe Outflow Identifier		C	20	Foreign Key. An operator generated identifier of the utility line pipe to which the subject item is connected.
Pit Diameter Dimension		D		The diameter dimension of the subject item, measured from inside face of wall to inside face of opposite wall.
Pit Length Dimension		D		The length dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
Pit Liner Type Code	type list - manhole liner	C	16	The type of liner used if the pit/manhole is used for neutralizing chemicals.
Pit Neutralization Agent Name		C	30	The chemical agent in the pit which chemically neutralizes the in stream reactant.
Pit Number of Pipes Quantity		S		The number of the pipes entering and exiting the subject item.
Pit Reactantance Amount		C	30	The chemical in the incoming waste stream being neutralized.
Pit Width Dimension		D		The width dimension of the subject item, from outside face of exterior wall/side to outside face of opposite exterior wall/side.
Plant Area		D		The overall surface measurement within the limits of the plant or facility (e.g., within fence or building).
Plant Dimension		D		The finished floor elevation of the treatment plant, in feet (English units) or meters (SI units) above some datum.
Plant Width Dimension		D		The overall width dimension of a utility plant.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Pole & Tower Condition Code	condition list - pole	C	16	The condition of the subject item when last inspected.
Pole & Tower Design Discriminator	discriminator - pole	C	16	Discriminator. This value differentiates similar entities by use or type.
Pole Depth Dimension		D		The depth the pole is buried in the foundation (usually the ground surface).
Pole Height Dimension		D		The distance the pole extends above the foundation (usually the ground surface).
Pole Length Dimension		D		The overall length of the pole from tip to tip.
Pole Material Code	material list - pole	C	16	The material composition of the pole.
Pollution Type Code	pollution discharge	C	16	Discriminator for pollution type.
Power Factor Amount		R		The cosine of the phase angle between the voltage and the current that the generator creates.
Power Generated Quantity		D		The power generated by the pump, equal in the U.S. to 746 watts and nearly equivalent to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
Power Required Code	value list - voltage	C	16	The voltage of the electrical power required by the subject item.
Pressure Alarm Level Dimension		D		The preset pressure setting of a tank which activates a low tank pressure alarm.
Pressure Required Rate		D		The required maximum outlet pressure setting for the regulator.
Pressure Unit Measure Code	unit of measure	C	16	The unit of measure of pressure.
Primary Voltage Code	value list - voltage	C	16	The voltage on the source side of the regulator with the associated units given.
Priming Method Code		C	15	The method by which the pump is primed.
Priming Requirement Indicator Code	value list - boolean	C	16	An indicator as to whether or not the pump has to be primed? (yes or no).
Process Type Name		C	30	The specific type of separation process.
Product Type Code	type list - heating-cooling	C	16	The type of product (chilled water, high temp, etc) produced at this plant.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Pump Capacity Rate		R		The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
Pump Design Discriminator	discriminator - wastewater pump	C	16	Discriminator. The design of the pump/booster station.
Pump Installation Type Code	discriminator - electric switch	C	16	Discriminator. This value differentiates similar entities by use or type.
Pump Station Type Code	discriminator - pump sta	C	16	Discriminator. This value differentiates similar entities by use or type.
Pump Type Code	type list - pump	C	16	A discriminator indicating the kind, class, or group of the subject item.
Rate Capacity Unit Measure Code	unit of measure	C	16	The unit of measure for rate capacity data (e.g., gallons per minute).
Rate Unit Measure Code	unit of measure	C	16	The unit of measure for rate.
Rated Flow Capacity Rate		R		The plant manufacturer's rated treatment plant capacity (e.g., gpm), which signifies the peak constant or daily flow of raw water that the plant can treat and transform to the specified water quality requirements.
Rated Outflow Volume		R		The manufacturer's pump capacity (e.g., gpm) rating at a specific design total dynamic head (TDH), usually depicted by a pump curve.
Reactantance Amount		C	30	The chemical in the incoming waste stream being neutralized.
Reactive Power Rating Code	value list - electric kvar	C	16	The rating of the capacitor's ability to provide reactive power to a circuit.
Readout Display Type Code	type list - display	C	16	The type of display or readout for the device.
Regulator Complex Power Rate		S		The maximum continuous complex power rating of the regulator.
Regulator Dimension		D		The elevation of the pressure regulator, measured at the regulator centerline.
Regulatory Type Code	type list - electric volt regul	C	16	The type of voltage regulator.
Required Maximum Outlet Pressure Rate		D		The required maximum outlet pressure setting for the regulator.
Required Maximum Pressure Rate		D		The required maximum outlet pressure setting for the regulator.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Reservoir Width Dimension		D		The average width dimension of the reservoir, measured from top of opposite side slopes.
Residual Pressure Rate		D		The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection.
Rim Dimension		D		The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
Riser Material Type Code	material list - pole	C	16	The material composition of the pole riser.
River Mile Reference Dimension		D		River mile marker.
Rock Condition Code	condition list - rock strength	C	16	The condition of the rock relative to the rocks strength and integrity.
Sampling Frequency Rate		S		The frequency at which material sampling is conducted.
Sanitary Wastewater Use Code	value list - boolean	C	16	An indicator as to whether or not the lagoon is used for wastewater. (yes or no)
Screen Type Code	type list - culvert screen	C	16	The type of screen used to cover the end of the culvert.
Second Transformer Capacity Volume		I		The capacity of the second transformer contained in the transformer bank. Used exclusively for displaying the capacities in the bank.
Secondary Voltage Code	value list - voltage	C	16	The voltage on the load side of the regulator with the associated units given.
Separator Volume		D		The volume of the oil-water separator.
Serial Number Code		C	15	The manufacturer's serial, or unique identification number of the subject item.
Service Code	value list - boolean	C	16	An indicator as to whether or not the meter is installed on a service line? (yes or no)
Service Line Code	value list - boolean	C	16	An indicator as to whether or not the meter is installed on a service line? (yes or no)
Sign Height Dimension		D		The height dimension of the sign.
Sign Material Composition Code	material list - pole	C	16	The material composition of the sign.
Sign Text		C	30	The text on the sign, up to 30 characters.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Sign Width Dimension		D		The width dimension of the sign.
Size Dimension		R		The manufacturer's nominal size designation.
Size Unit Measure Code	unit of measure	C	16	The unit of measure for size.
Slope Measure Unit Code	unit of measure	C	16	The unit of measure for slope.
Sludge Bed Capacity Volume		R		The sludge bed's storage capacity (e.g., gallons, ft3, etc).
Sludge Bed Width Dimension		D		The exterior width dimension of the sludge bed, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
Sludge Drying Bed Area		D		The interior surface area of the sludge bed.
Soil Consistency Code	condition list - soil consistncy	C	16	The consistency of the soil indicating soil condition and strength.
Soil Erosion Code	soils - erosion K	C	16	The erosion potential of the soil.
Soil Family Code	soils - family	C	16	The soil family.
Soil Percolation Rate		D		The percolation rate of the soil in which the drain field lines are placed.
Soil Percolation Unit Measure Code	unit of measure	C	16	The unit of measure for soil percolation.
Soil Texture Code	soils - texture	C	16	The soil texture.
Sound Dampening Insulation Code	value list - boolean	C	16	An indicator as to whether or not Insulation was added to dampen the transmission of noise. (yes or no)
Spare Analog Inputs Amount		I		The number of spare analog-in ports.
Spare Analog Outputs Amount		I		The number of spare analog-out ports.
Spare Digital Inputs Quantity		I		The number of spare digital-in ports.
Spare Digital Outputs Quantity		I		The number of spare digital-out ports.
Startup Configuration Type Code	type list - electric motor start	C	16	The startup configuration for the motor.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Static Pressure Head Rate		D		The numeric pressure head on the subject item under static (i.e., no flow or demand) conditions in the utility system.
Station Area		D		The size of the area, zone, or polygon in square units.
Station Dimension		D		The top surface elevation of the subject item's interior floor/bottom in feet (English units) or meters (SI units) above some datum.
Station Length Dimension		D		The length dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
Station Width Dimension		D		The width dimension of the station, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
Stilling Basin Area		D		The size of the area, zone, or polygon in square units.
Stilling Basin Width Dimension		D		The average width dimension of the stilling basin, measured from top of opposite side slopes.
Stilling Tank Area		D		The overall area of the septic tank and drain field.
Storm Sewer Armor Type Code	hydrography - bank armor lining	C	16	The type of channel armor used.
Storm Sewer Collection Reservoirs Type Code	type list - reservoir	C	16	The type or classification of the reservoir.
Storm Sewer Collection Reservoirs Use Code	use list - reservoir	C	16	The particular application, or use the subject item.
Storm Sewer Discharge Location Identifier		C	20	Foreign Key. An operator generated identifier used locally to reference the discharge identification for the subject item.
Storm Sewer Discharge Location Type Code	type list - effluent discharge	C	16	A discriminator indicating the kind, class, or group of the subject item.
Storm Sewer Downspout Type Code	type list - pipe	C	16	A discriminator indicating the kind, class, or group of the subject item.
Storm Sewer Drainage Basin Identifier		C	20	Foreign Key. An operator generated identifier that uniquely identifies the subject item.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Storm Sewer Fitting Location Type Code	discriminator - waste fitting	C	16	A discriminator indicating the kind, class, or group of the subject item.
Storm Sewer Flow Control Devices Identifier		C	20	Foreign Key. An operator generated identifier for the flow control device.
Storm Sewer Flow Control Devices Type Code	type list - water flow control	C	16	A discriminator indicating the kind, class, or group of the subject item.
Storm Sewer Junction Identifier		C	20	Foreign Key. An operator generated identifier use to locally identify the subject item.
Storm Sewer Junction Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole for the subject utility.
Storm Sewer Junction Use Code	discriminator - storm manhole	C	16	Discriminator. An attribute that differentiates the use of the subject item.
Storm Sewer Line Type Code	type list - pipe	C	16	A discriminator indicating the kind, class, or group of the subject item.
Storm Sewer Line Use Code	discriminator - pipe	C	16	Discriminator. This value differentiates similar entities by use or type.
Storm Sewer Oil Water Separator Type Code	type list - oil/water separator	C	16	A discriminator indicating the kind, class, or group of the subject item.
Storm Sewer Open Drainage Identifier		C	20	Foreign Key. Used to link the record to an applicable channel record.
Storm Sewer Pump Identifier		C	20	Foreign Key. A unique, user defined identifier for each record or instance of an entity.
Storm Sewer Pump Type Code	type list - pump	C	16	A discriminator indicating the kind, class, or group of the subject item.
Storm Sewer Pump Use Code	use list - pump	C	16	The particular application, or use the subject item.
Storm Sewer Pumping Station Identifier		C	20	Foreign Key. Used to link the record to an associated station (pump station, pressure reducing station).
Storm Sewer Pumping Station Type Code	type list - station	C	16	A discriminator indicating the kind, class, or group of the subject item.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Storm Sewer Stilling Basin Type Code	type list - stilling basin	C	16	A discriminator indicating the kind, class, or group of the subject item.
Storm Sewer Valve Use Code	use list - valve	C	16	The particular application, or use the subject item.
Structure Condition Code	structure - condition	C	16	Indicates a state of being, or readiness for use of the subject item(e.g., good, fair, poor), from lists or field inspections.
Substation Voltage Input Code	value list - voltage	C	16	The line-to-line voltage of the transmission line that is the source for the substation.
Substation Voltage Output Code	value list - voltage	C	16	The line-to-line output voltage of the substation.
Switch Dimension		C	20	A three dimensional description of the amount of space which a switch occupies (e.g., 2 x 1 x 4).
Switch Number of Phases Quantity		S		The number of phases opened by the switch.
Switch Phase Code	value list - boolean	C	16	This indicates whether the capacitor is presently in the circuit or is not presently in the circuit.
Switch Voltage Code	value list - voltage	C	16	The system voltage of the electrical line at the point in which the switch is inserted.
System X Coordinate		D		A site specific numerical coordinate denoting the location of the node_id_1 in reference to the x-axis or plane.
System Y Coordinate		D		A site specific numerical coordinate denoting the vertical location referenced to the specified datum.
Tank Alarm Dimension		D		Elevation of water in upstream ground water storage tank(s) which represents a low level which activates a "low water/pressure alarm".
Tank Diameter Dimension		D		The inside diameter of the tank, measured from the interior wall surface to the opposite interior wall surface.
Tank Style Code	style list - tank	C	16	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
Tank Type Code	style list - tank	C	16	The particular kind, class, or group of tank (e.g., elevated, hydropneumatic, etc.).
Tank Width Dimension		D		The exterior width dimension of the tank, measured from outside face of the exterior wall/side to outside face of the opposite exterior wall/side.
Temperature Unit Measure Code	unit of measure	C	16	The unit of measure for temperature.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Tensile Force Unit Measure Code	unit of measure	C	16	The unit of measure of tension .
Test Type Code	type list - sewage test	C	16	The type of test used to evaluate the contained material.
Third Transformer Capacity Volume		I		The capacity of the third transformer contained in the transformer bank. Used exclusively for displaying the capacities in the bank.
To X Coordinate		D		The x component of individual beginning coordinate point.
To Y Coordinate		D		The y component of individual beginning coordinate point.
To Z Coordinate		D		The z component of individual beginning coordinate point.
Top Dimension		D		The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
Top Elevation Dimension		D		The elevation of exterior top surface of the subject item's lid, hatch, rim, or roof in feet (English units) or meters (SI units) above some datum.
Top Width Dimension		D		The top width of the armor.
Top Width of Mean Flow Dimension		D		The average top width of the mean flow.
Total Dynamic Head Dimension		D		The total dynamic head upon which the capacity _{rated} is based.
Total Dynamic Head Rate		D		The total dynamic head upon which the capacity _{rated} is based.
Total Dynamic Head Unit Measure Code	unit of measure	C	16	The unit of measure for Total Dynamic Head (TDH), usually expressed in feet (English units).
Total KVA Rate		D		The total kva rate for all transformers attached to the transformer bank.
Transformers in Second Group Quantity		S		The number of transformers in the second group.
Treatment Date		I		The date that the pole was last treated. Format for date is YYYYMMDD (i.e. September 15, 1994 = 19940915).
Treatment Plant Type Code	type list - treatment plant	C	16	A discriminator indicating the kind, class, or group of the subject item.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Treatment Type Code	type list - pole treatment	C	16	Defines any treatment applied to the pole to improve its life.
Trench Width Dimension		D		The trench width excavated for the field drains.
Tributary Utility Subsystem Code		C	20	An operator generated identifier used locally to identify a tributary subsystem of the main utility system.
Unique Feature Identifier		C	20	Primary Key. A unique, user defined identifier for each record or instance of an entity.
Use Rate		S		The fuel/gas usage rate for the subject item.
User Flag Text		C	20	An operator defined work area. This attribute can be used by the operator for user defined system processes. It does not effect the subject item's data integrity and should not be used to store the subject item's data.
Valve Dimension		D		The elevation measured at centerline of the valve, in feet (English units) or meters (SI units) above some datum.
Valve Style Code	style list - valve	C	16	The particular kind, class, or group of valve (e.g., gate, check, etc.).
Vault Area		D		The overall surface measurement within the limits of the vault facility (e.g., within fence or building).
Vault Industrial Wastewater Use Code	value list - boolean	C	16	An indicator as to whether or not the vault is used for industrial wastewater. (yes or no)
Vault Pipe Outlet Code	value list - boolean	C	16	An indicator as to whether or not the vault has pipe outlets. (yes or no)
Vault Wastewater Use Code	value list - boolean	C	16	An indicator as to whether or not the vault is used for wastewater. (yes or no)
Vault Width Dimension		D		The average width dimension of the vault, measured from top of opposite side slopes.
Voltage Input Code	value list - voltage	C	16	The input AC voltage to the rectifier.
Voltage Output Code	value list - voltage	C	16	The output DC voltage from the rectifier to the anode system.
Volume Unit Measure Code	unit of measure	C	16	The unit of measure of volume.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Wastewater Disposal Tank Use Code	use list - tank	C	16	The particular kind or use of the waste water tank.
Wastewater Downspout Type Code	type list - pipe	C	16	A discriminator indicating the kind, class, or group of the subject item.
Wastewater Drain Field Identifier		C	20	Foreign Key. An operator generated identifier of the utility line pipe to which the subject item is connected. Pipe_id represents the unique site specific numerical designation assigned to each section of pipe in a utility system (e.g., water, gas, sewer), interconnected by
Wastewater Drain Field Type Code	type list - pipe	C	16	A discriminator indicating the kind, class, or group of the subject item.
Wastewater Drain Field Use Code	discriminator - wastewater line	C	16	Discriminator. This value differentiates similar entities by use or type.
Wastewater Fitting Location Type Code	discriminator - waste fitting	C	16	A discriminator indicating the kind, class, or group of the subject item.
Wastewater Junction Identifier		C	20	Foreign Key. An operator generated identifier use to locally identify the subject item.
Wastewater Junction Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole for the subject utility.
Wastewater Junction Use Code	discriminator - waste manhole	C	16	Discriminator. An attribute that differentiates the use of the subject item.
Wastewater Lagoon Type Code	type list - lagoon	C	16	A discriminator indicating the kind, class, or group of the subject item.
Wastewater Lagoon Use Code	value list - boolean	C	16	An indicator as to whether or not the lagoon is used for industrial wastewater. (yes or no)
Wastewater Meter Type Code	type list - water meter	C	16	A discriminator indicating the kind, class, or group of the subject item.
Wastewater Neutralizer Type Code	type list - manhole	C	16	A discriminator indicating the kind, class, or group of manhole/pit for the subject utility.
Wastewater Oil & Water Separator Type Code	type list - oil/water separator	C	16	A discriminator indicating the kind, class, or group of the subject item.
Wastewater Pump Ejector Station Identifier		C	20	Foreign Key. Used to link the record to an associated station (pump station, pressure reducing station).

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Wastewater Pump Ejector Station Type Code	type list - station	C	16	A discriminator indicating the kind, class, or group of the subject item.
Wastewater Pump Identifier		C	20	Foreign Key. Used to link the test to the Waste Water Pump.
Wastewater Pump Type Code	type list - pump	C	16	A discriminator indicating the kind, class, or group of the subject item.
Wastewater Pump Use Code	use list - pump	C	16	The particular application, or use the subject item.
Wastewater Stilling Tank Identifier		C	20	Foreign Key. An operator generated identifier used to locally identify the subject item.
Wastewater Stilling Tank Use Code	type list - wastewater tank	C	16	This value differentiates similar entities by use or type.
Wastewater System Discharge Location Identifier		C	20	Foreign Key. An operator generated identifier used locally to reference the discharge identification for the subject item.
Wastewater System Discharge Location Type Code	type list - effluent discharge	C	16	A discriminator indicating the kind, class, or group of the subject item.
Wastewater Treatment Plant Identifier		C	20	Foreign Key. The site specific unique identification name or number of the treatment plant.
Wastewater Valve Use Code	use list - valve	C	16	The particular application, or use the subject item.
Water Anode Test Station Type Code	type list - anode test station	C	16	The type of anode test station configuration use.
Water Elevation Dimension		R		The water elevation of the maximum design head of the pump in feet NGVD.
Water Fitting Type Code	discriminator - gas/wat fitting	C	16	A discriminator indicating the kind, class, or group of the subject item.
Water Junction Identifier		C	20	Foreign Key. An operator generated identifier use to locally identify the subject item.
Water Junction Use Code	discriminator - water manhole	C	16	Discriminator. An attribute that differentiates the use of the subject item.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Water Line Identifier		C	20	Foreign Key. An operator generated identifier of the utility line pipe to which the subject item is connected. Pipe_id represents the unique site specific numerical designation assigned to each section of pipe in a utility system (e.g., water, gas, sewer), interconnected by
Water Line Type Code	type list - pipe	C	16	The kind, class, or group of the subject item.
Water Line Use Code	discriminator - water pipe	C	16	Discriminator. This value differentiates similar entities by use or type.
Water Meter Type Code	type list - water meter	C	16	A discriminator indicating the kind, class, or group of the subject item.
Water Pump Identifier		C	20	Foreign Key. A unique, user defined identifier for each record or instance of an entity.
Water Pump Type Code	type list - pump	C	16	A discriminator indicating the kind, class, or group of the subject item.
Water Pump Use Code	use list - pump	C	16	The particular application, or use the subject item.
Water Pumping Station Identifier		C	20	Foreign Key. Used to link the record to an associated station (pump station, pressure reducing station).
Water Pumping Station Type Code	discriminator - pump sta	C	16	The type of station.
Water Regulator Reducer Identifier		C	20	Foreign Key. The unique identification name or number of the pressure regulator (i.e., pressure reducer valve).
Water Regulator Reducer Type Code	discriminator - regulator	C	16	A discriminator indicating the kind, class, or group of the subject item.
Water Residual Pressure Rate		D		The measured pressure at a hydrant or connection during a flow test conducted at the subject hydrant or connection.
Water Source Area		D		The size of the area, zone, or polygon in square units.
Water Source Code	type list - water source	C	16	The point of origin of a water system's water supply.
Water Source Identifier		C	20	Foreign Key. An operator generated identifier identifying name or number of the water source.
Water Source Name Code	name list - water source	C	16	The name of the water source (e.g., Mississippi River, Bayou LaFouche, etc.).

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Water Source Type Code	type list - water source	C	16	A discriminator indicating the kind, class, or group of the subject item.
Water Tank Identifier		C	20	Foreign Key. An operator generated identifier used to locally identify the subject item.
Water Tank Use Code	use list - tank	C	16	The particular kind or use of the tank (e.g., raw water, potable, etc.).
Water Treatment Plant Identifier		C	20	Foreign Key. The site specific unique identification name or number of the treatment plant.
Water Treatment Plant Type Code	type list - treatment plant	C	16	A discriminator indicating the kind, class, or group of the subject item.
Water Valve Location Identifier		C	20	Foreign Key. The unique site specific identification name or number of a valve associated with or connected to the subject item.
Water Valve Location Use Code	discriminator - valve	C	16	The site specific use of the valve.
Weight		S		Weight of the subject item.
Weight Unit Measure Code	unit of measure	C	16	The unit of measure for weight.
Weir Elevation Dimension		D		Elevation of the weir invert.
Weir Outlets Code	value list - boolean	C	16	An indicator as to whether or not the subject item has weir outlets. (yes or no)
Wet Well Capacity Volume		D		The wet well capacity.
Width Dimension		D		The width dimension of the subject item, measured from opposite inside faces.
Winding Configuration Type Code	type list - winding connection	C	16	A label representing the configuration of the stator winding connections.
Wire Size Code	dimension list - electric cable	C	16	The AWG size designation for the wire connecting the anode/anode packet to the anode test station.
Wire Type Code	type list - electric cable	C	16	The conductor configuration, typically solid or stranded.
X Coordinate		D		The x component of an individual coordinate point.
Y Coordinate		D		The y component of an individual coordinate point.

ATTRIBUTE NAME	DOMAIN NAME	DATA TYPE	CHAR LENGTH	DEFINITION
Z Coordinate		D		The z component of an individual coordinate point.

Appendix D: Utilities Domains

(Informative)

DOMAIN NAME archeology - significance

DEFINITION Discipline associated with a particular archeological discovery

<u>VALUE</u>	<u>DEFINITION</u>
AGRICULTURE	agriculture
ARCHEO_01	archeology/prehistoric
ARCHEO_02	archeology/historic/aboriginal
ARCHEO_03	archeology/historic/neoaboriginal
ARCHITECTURE	architecture
ART	art
COMMERCE	commerce
COMPLANNING	community planning and develop
COMMUNICATE	communications
CONSERVATION	conservation
ECONOMICS	economics
EDUCATION	education
ENGINEERING	engineering
ENTERTAINREC	entertainment/recreation
ETHNIC_01	ethnic heritage - Asian
ETHNIC_02	ethnic heritage - Black
ETHNIC_03	ethnic heritage - European
ETHNIC_04	ethnic heritage - Hispanic
ETHNIC_05	ethnic heritage - Native America
ETHNIC_06	ethnic heritage - Pacific Island
ETHNIC_07	ethnic heritage - other
HISTEXPLORER	historic exploration
HISTORSETTLE	historic settlement
HUMANITARIAN	humanitarian
INDUSTRY	industry
INVENTION	invention
LANDSCAPE	landscape architecture
LAW	law
LITERATURE	literature
MARITIME	maritime history
MEDICINE	medicine/health
MILITARY	military
PERFORMARTS	performing arts
PHILOSOPHY	philosophy
POLITICSGOV	politics/government
RELIGION	religion/religious articles
SCIENCE	science

SOCIALHISTORY	social history
TBD	to be determined
TRANSPORTATN	transportation
UNKNOWN	other/unknown/not applicable

DOMAIN NAME code list - manufacture

DEFINITION Allowable manufacturers code list.

<u>VALUE</u>	<u>DEFINITION</u>
ALCOA	Aluminum Company of America
GE	General Electric
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME code list - states

DEFINITION The abbreviations of all of the states.

<u>VALUE</u>	<u>DEFINITION</u>
AK	Alaska
AL	Alabama
AR	Arkansas
AZ	Arizona
CA	California
CO	Colorado
CT	Connecticut
DC	District of Columbia
DE	Delaware
FL	Florida
GA	Georgia
HI	Hawaii
IA	Iowa
ID	Idaho
IL	Illinois
IN	Indiana
KS	Kansas
KY	Kentucky
LA	Louisiana
MA	Massachusetts
MD	Maryland
ME	Maine
MI	Michigan

MN	Minnesota
MO	Missouri
MS	Mississippi
MT	Montana
NC	North Carolina
ND	North Dakota
NE	Nebraska
NH	New Hampshire
NJ	New Jersey
NM	New Mexico
NV	Nevada
NY	New York
OH	Ohio
OK	Oklahoma
OR	Oregon
OTHER	other
PA	Pennsylvania
RI	Rhode Island
SC	South Carolina
SD	South Dakota
TBD	to be determined
TN	Tennessee
TX	Texas
UNKNOWN	unknown
UT	Utah
VA	Virginia
VT	Vermont
WA	Washington
WI	Wisconsin
WV	West Virginia
WY	Wyoming

DOMAIN NAME condition list - pole

DEFINITION Allowable input for the condition of a pole or tower.

<u>VALUE</u>	<u>DEFINITION</u>
CRACKED	cracked but useable
FAIR	fair condition
GOOD	good condition
OTHER	other
SPLINTER	splintered but useable
TBD	to be determined

UNUSEABLE unuseable

DOMAIN NAME condition list - rock strength

DEFINITION Allowable input values for condition list of rock strengths

<u>VALUE</u>	<u>DEFINITION</u>
HIGH	high dry strength/toughness
LOW	low dry strength/toughness
MEDIUM	medium dry strength/toughness
NONE	very weak, no strength, probably should class as soil
OTHER	other
TBD	to be determined
UNKNOWN	unknown
VERYHIGH	very high dry strength/toughness

DOMAIN NAME condition list - soil consistency

DEFINITION Allowable input values for condition list of soil consistencies

<u>VALUE</u>	<u>DEFINITION</u>
FIRM	firm
HARD	hard
MEDIUMFIRM	medium firm
OTHER	other
SOFT	soft
TBD	to be determined
UNKNOWN	unknown
VERYHARD	very hard
VERYSOFT	very soft

DOMAIN NAME cultural - historic value

DEFINITION Historical import as a result of modifications made to a historic building/structure or area.

<u>VALUE</u>	<u>DEFINITION</u>
HIGH	high-minor modifications made
HIGHEST	highest-major historical import
INTRUSION	intrusion
MEDIUM	medium-major modifications made
MINOR	minor-little/no historic import

DOMAIN NAME cultural - impact

DEFINITION Local impact of cultural considerations.

<u>VALUE</u>	<u>DEFINITION</u>
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AGRICULTURE	agriculture
BIOTURBATION	bioturbation
COMBINED	combined effects, more than one
CRYOTURBATION	cryoturbation
ENVIRONMENTAL	environmental
EXCAVATION	channel/canal excavation
HISTORICAL	historical
INDUCED EROSION	project induced erosion
INTACT	intact
INUNDATED	inundated
MARITIME	maritime
MINERAL_IND	mineral industry
NATURAL EROSION	natural erosion
OIL_AND_GAS	oil and gas industry
OTHER_CONST	other construction
OTHER_NATURAL	other natural
PASTURE	pasture
RAILROAD_CONST	railroad construction
ROAD_CONST	road construction
SPOIL_PILE	spoil pile
SUBSIDENCE	subsidence
TBD	to be determined
TIMBER_INDUSTRY	timber industry
UNKNOWN	unknown
URBAN_DEVELOP	urban development
VANDALISM	vandalism

DOMAIN NAME cultural - national regis consid

DEFINITION Allowable input values for list of cultural national registration considerations

<u>VALUE</u>	<u>DEFINITION</u>
BIRTHPLACE	birthplace
COMMEMORATIVE	commemorative property
GRAVE	grave
RECONSTRUCTED	reconstructed structure
RELIGION	religion associated
REMOVED	removed from original location
UNDER 50 YRS	less than fifty (50) years and achieved significant

DOMAIN NAME cultural - national regis criter

DEFINITION Allowable input values for list of cultural national registration criteria

<u>VALUE</u>	<u>DEFINITION</u>
A	crit. a - significant event
B	crit. b - significant person
C	crit. c - architecture,art,engineering
D	crit. d - date recovery potential
NA	not applicable - resource not eligible
NCL	resource considered eligible w/no criteria listed

DOMAIN NAME cultural - national regis status

DEFINITION Allowable input values for list of cultural national registration status

<u>VALUE</u>	<u>DEFINITION</u>
ELIGIBLE	determined eligible (SHPO determination)
LISTED	listed
NATLANDMARK	national landmark
NATUSRELIGN	native american religious site
NOMINATED	nominated
NOTELIGIBLE	not eligible (SHPO determination)
PARTOFNRHP	part of NRHP district
PENDINGNOMIN	pending nomination
RECOMMENDNO	recommended ineligible (recorders recommendation)
RECOMMENDYES	recommended eligible (recorders recommendation)
REMOVEDELIGB	removed from eligible listing
REMOVEDNRHP	removed from NRHP, NHL listing
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME dimension list - electric cable

DEFINITION Allowable input used to define an electrical cable dimension.

<u>VALUE</u>	<u>DEFINITION</u>
#1/0	#1/0
#10	#10
#14	#14
#16	#16
#18	#18
#19	#19
#2/0	#2/0
#20	#20

#22	#22
#24	#24
#26	#26
#28	#28
#3/0	#3/0
#30	#30
#32	#32
#34	#34
#36	#36
#4/0	#4/0
0.375	3/8 inch
0.5	0.5 inch
0.75	0.75 inch
0_375	3/8 inch
0_5	0.5 inch
0_75	0.75 inch
1	1 inch
1.25	1.25 inches
1.5	1.5 inches
1_25	1.25 inches
1_5	1.5 inches
1000_MCM	1000 K circular mils
1033.5_MCM	1033.5 K circular mils, ACSR
1113_MCM	1113 K circular mils, ACSR
12	12 inches
1272_MCM	1272 K circular mils, ACSR
1431_MCM	1431 K circular mils, ACSR
1590_MCM	1590 K circular mils, ACSR
2	2 inches
2.5	2.5 inches
2_5	2.5 inches
2156_MCM	2156 K circular mils, ACSR
250_MCM	250 K circular mils
266.8_MCM	266.8 K circular mils, ACSR
3	3 inches
3.5	3.5 inches
3_5	3.5 inches
300_MCM	300 K circular mils
336.4_MCM	336.4 K circular mils, ACSR
336_MCM	336 K circular mils
350_MCM	350 K circular mils
397.5_MCM	397.5 K circular mils, ACSR

4	4 inches
400_MCM	400 K circular mils
477_MCM	477 K circular mils
477_MCM_A	477 K circular mils, ACSR
5	5 inches
500_MCM	500 K circular mils
556.5_MCM	556.5 K circular mils, ACSR
556_5_MCM_A	556.5 K circular mils, ACSR
6	6 inches
600_MCM	600 K circular mils
636_MCM	636 K circular mils
636_MCM_A	636 K circular mils, ACSR
7	7 inches
700_MCM	700 K circular mils
750_MCM	750 K circular mils
795_MCM_A	795 K circular mils, ACSR
8	8 inches
800_MCM	800 K circular mils
9	9 inches
900_MCM	900 K circular mils
954_MCM_A	954 K circular mils, ACSR
BITTERN	1272 K circular mils, ACSR,45/7
BLUEBIRD	2156 K circular mils, ACSR,84/19
BLUEJAY	1113 K circular mils, ACSR,45/7
BOBOLINK	1431 K circular mils, ACSR,45/7
CARDINAL	954 K circular mils, ACSR,54/7
CHICKADEE	397.5 K circular mils, ACSR,18/1
DOVE	556.5 K circular mils, ACSR,26/7
DRAKE	795 K circular mils, ACSR,26/7
FALCON	1590 K circular mils, ACSR,54/19
FINCH	1113 K circular mils, ACSR,54/19
FLICKER	477 K circular mils, ACSR,24/7
GROSBEAK	636 K circular mils, ACSR,24/7
HAWK	477 K circular mils, ACSR,26/7
HEN	477 K circular mils, ACSR,30/7
IBIS	397.5 K circular mils, ACSR,26/7
LAPWING	1590 K circular mils, ACSR,45/7
LINNET	336.4 K circular mils, ACSR,26/7
MERLIN	336.4 K circular mils, ACSR,18/1
N1	#1
N1 0	#1/0
N10	#10

N12	#12
N14	#14
N16	#16
N18	#18
N19	#19
N2	#2
N2_0	#2/0
N20	#20
N22	#22
N24	#24
N26	#26
N28	#28
N3	#3
N3_0	#3/0
N30	#30
N32	#32
N34	#34
N36	#36
N4	#4
N4_0	#4/0
N5	#5
N6	#6
N8	#8
ORIOLE	336.4 K circular mils, ACSR,30/7
ORTOLAN	1033.5 K circular mils,45/7
OSPREY	556.5 K circular mils, ACSR,18/1
OSTRICH	300 K circular mils, ACSR,26/7
OTHER	other
PARAKEET	556.5 K circular mils, ACSR,24/7
PARTRIDGE	556.5 K circular mils, ACSR,26/7
PELICAN	266.8 K circular mils, ACSR,18/1
PHEASANT	477 K circular mils, ACSR,54/19
PLOVER	1272 K circular mils, ACSR,54/19
RAIL	1431 K circular mils, ACSR,45/7
ROOK	954 K circular mils, ACSR,24/7
TBD	to be determined
TERN	795 K circular mils, ACSR,45/7
UNKNOWN	unknown
WAXWING	266.8 K circular mils, ACSR,18/1

DOMAIN NAME discriminator - electric cable

DEFINITION Discriminator - Values that differentiate installed location of electrical cable.

<u>VALUE</u>	<u>DEFINITION</u>
ABANDONED	abandoned/inactive
PRIMARY_OH	primary overhead
PRIMARY_UG	primary underground
SECONDARY_OH	secondary overhead
SECONDARY_UG	secondary underground
SERVICE_OH	service overhead
SERVICE_UG	service underground

DOMAIN NAME discriminator - electric manhole

DEFINITION Discriminator - Values that differentiate the type of utility connection.

<u>VALUE</u>	<u>DEFINITION</u>
HANDHOLE	handhole
JUNCTION_BOX	junction box
MANHOLE	manhole
PULL_BOX	pull box

DOMAIN NAME discriminator - electric switch

DEFINITION Discriminator - Values that differentiate the type of electric switch.

<u>VALUE</u>	<u>DEFINITION</u>
CIRCUIT_BRKR	circuit breaker
CUBICLE	installed in a cubicle.
FUSE_CUTOUT	fuse cutout
GANG_DISC	gang operated disconnect
POLE_MOUNTED	mounted on pole or tower
RECLOSER	reclosure

DOMAIN NAME discriminator - electric tranbnk

DEFINITION Discriminator - Values that differentiate the mount location of an electrical transformer bank.

<u>VALUE</u>	<u>DEFINITION</u>
PAD_MOUNTED	pad mounted transformer bank
POLE_MOUNTED	pole mounted transformer bank

DOMAIN NAME discriminator - external light

DEFINITION Various kinds of mounts for external lights.

<u>VALUE</u>	<u>DEFINITION</u>
FLOOD_LIGHT	Lights designed to flood an area with light, as in the case of an athletic field.
POLE_MOUNT	Lights mounted on poles
STREET_LIGHT	Lights specifically designed to illuminate the street below.
WALK_LIGHT	Normally a low mounted light designed to illuminate a walkway or beside a driveway.

DOMAIN NAME discriminator - fire connection

DEFINITION Discriminator - Values that differentiate the type of fire department connection.

<u>VALUE</u>	<u>DEFINITION</u>
FIRE_CONNECT	fire department connection
FIRE_HYDRANT	fire hydrant

DOMAIN NAME discriminator - fuel manhole

DEFINITION Discriminator - Values that differentiate the type of utility connection.

<u>VALUE</u>	<u>DEFINITION</u>
HYDRANT_PIT	hydrant control pit
JUNCTION_BOX	junction box
MANHOLE	manhole
TEST_BOX	test box
VALVE_PIT	valve pit
VENT_PIT	vent pit

DOMAIN NAME discriminator - fuel pipe

DEFINITION Discriminator - Values that differentiate the general use of a fuel pipe.

<u>VALUE</u>	<u>DEFINITION</u>
ABANDONED	abandoned/inactive pipe
DEFUELING	defueling line
MAIN	main line
SERVICE	building/facility service
VENT	vent line

DOMAIN NAME discriminator - future structure

DEFINITION Various status of structures which are yet to be built or are under construction.

<u>VALUE</u>	<u>DEFINITION</u>
FUTURE_DEV	Structural definition and status of a planned building or future development of an existing building.

UNDER_CONST Structural definition and status of a building under construction.

DOMAIN NAME discriminator - gas pump sta

DEFINITION Discriminator - Values that differentiate the type of natural gas pump station.

<u>VALUE</u>	<u>DEFINITION</u>
BOOSTER	booster station
PRESS_REDUCE	pressure reducer station
PUMP	pump station

DOMAIN NAME discriminator - gas valve

DEFINITION Discriminator - Values that differentiate the type of natural gas valves.

<u>VALUE</u>	<u>DEFINITION</u>
DRIP POT	drip pot
TAP	line tap
VALVE	valve

DOMAIN NAME discriminator - gas/wat fitting

DEFINITION Discriminator - Various fitting types for Water and Natural Gas systems.

<u>VALUE</u>	<u>DEFINITION</u>
CAP	pipe cap
CROSS	pipe cross
TEE	pipe tee

DOMAIN NAME discriminator - h/c manhole

DEFINITION Discriminator - Values that differentiate the type of utility connection.

<u>VALUE</u>	<u>DEFINITION</u>
MANHOLE	manhole
VALVE_PIT	valve pit

DOMAIN NAME discriminator - hcs anchor

DEFINITION Discriminator - Values that differentiate the type of anchor used to control expansion of pipes in a central heating and cooling distribution system.

<u>VALUE</u>	<u>DEFINITION</u>
GUIDE_ANCHOR	guide anchor
RIGID_ANCHOR	rigid anchor

DOMAIN NAME discriminator - hcs fitting

DEFINITION Various kinds of fittings included in Heating and Cooling Systems.

<u>VALUE</u>	<u>DEFINITION</u>
CAP	pipe cap
FLANGE	pipe flange
REDUCER	pipe reducer

DOMAIN NAME discriminator - hcs pipe

DEFINITION Discriminator - Values that differentiate the use of central heating and cooling distribution system piping.

<u>VALUE</u>	<u>DEFINITION</u>
ABANDONED	Abandoned/inactive hcs-water line.
CHW_M	Chilled Water Main: water less than 45 deg. F.
CHW_S	Chilled Water Service: water less than 45 deg. F.
HTW_M	High Temperature Water Main: water greater than 250 deg. F
HTW_S	High Temperature Water Service: water greater than 250 deg. F
LTW_M	Low Temperature Water Main: water less than 250 deg. F.
LTW_S	Low Temperature Water Service: water less than 250 deg. F.
RETURN	return line
S_M	Steam Main
S_S	Steam Service

DOMAIN NAME discriminator - hcs plant

DEFINITION Discriminator - Values that differentiate the type of energy plant.

<u>VALUE</u>	<u>DEFINITION</u>
CHILLING_PLANT	chill water plant
HEATING_PLANT	high temp, low temp, and/or steam plant

DOMAIN NAME discriminator - hydrant

DEFINITION Discriminator - Values that differentiate the type of hydrant.

<u>VALUE</u>	<u>DEFINITION</u>
FAUCET	faucet
HYDRANT	hydrant
SPRINKLER	sprinkler head

DOMAIN NAME discriminator - ind wast manhole

DEFINITION Discriminator - Values that differentiate the type of utility connection.

<u>VALUE</u>	<u>DEFINITION</u>
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JUNCTION_BOX	junction box
MANHOLE	manhole

DOMAIN NAME discriminator - inlets

DEFINITION Discriminator - Values that differentiate the type of storm water inlet.

<u>VALUE</u>	<u>DEFINITION</u>
CURB_INLET	curb opening inlet
DROP_INLET	drop inlet
SURFACE_LINEAR	surface linear

DOMAIN NAME discriminator - installation

DEFINITION Discriminator - Values that differentiate the type of an installation

<u>VALUE</u>	<u>DEFINITION</u>
ABANDONED	abandoned
OVERHEAD	overhead
UNDERGROUND	underground

DOMAIN NAME discriminator - nat gas manhole

DEFINITION Discriminator - Values that differentiate the type of utility connection.

<u>VALUE</u>	<u>DEFINITION</u>
JUNCTION_BOX	junction box
MANHOLE	manhole
VALVE_PIT	valve pit
VENT_PIT	vent pit

DOMAIN NAME discriminator - natural gas pipe

DEFINITION Discriminator - Allowable input values for natural gas pipe use.

<u>VALUE</u>	<u>DEFINITION</u>
ABANDONED	abandoned line
MAIN	main line
SERVICE	service line
VENT	vent line

DOMAIN NAME discriminator - open channel

DEFINITION Discriminator - Values that differentiate the type of open drainage.

<u>VALUE</u>	<u>DEFINITION</u>
OPEN_DRAINAGE	The channel is part of an unaltered drainage system
PAVED_DITCH	The channel has a concrete or other paved surface

UNPAVED_DITCH The channel has no constructed or prepared surface

DOMAIN NAME discriminator - pipe

DEFINITION Discriminator - Values that differentiate the general use of a pipe.

<u>VALUE</u>	<u>DEFINITION</u>
ABANDONED	abandoned/inactive pipe
MAIN	main line
SERVICE	building/facility service

DOMAIN NAME discriminator - pole

DEFINITION Discriminator - Values that differentiate type of pole configuration.

<u>VALUE</u>	<u>DEFINITION</u>
DOUBLE POLE	double pole
POLE	pole
RISER POLE	riser pole
TOWER	tower

DOMAIN NAME discriminator - pump sta

DEFINITION Discriminator - Values that differentiate the type of wastewater pump station.

<u>VALUE</u>	<u>DEFINITION</u>
BOOSTER	booster station
PUMP	pump station

DOMAIN NAME discriminator - regulator

DEFINITION Discriminator of allowable regulator types.

<u>VALUE</u>	<u>DEFINITION</u>
REDUCER	reducer
REGULATOR	regulator

DOMAIN NAME discriminator - storm manhole

DEFINITION Discriminator - Values that differentiate the type of utility connection.

<u>VALUE</u>	<u>DEFINITION</u>
JUNCTION BOX	junction box
MANHOLE	manhole

DOMAIN NAME discriminator - structure status

DEFINITION Discriminator - Values that differentiate the management status or class of a building.

<u>VALUE</u>	<u>DEFINITION</u>
DEMOLITION	Structural definition and status of a building slated for demolition.
PERMANENT	Structural definition and status of a permanent building.
PORTABLE	Structural definition and status of a portable building.
SEMI-PERM	Structural definition and status of a semi-permanent building.
SEMI_PERM	Structural definition and status of a semi-permanent building.
TEMPORARY	Structural definition and status of a temporary building.

DOMAIN NAME discriminator - tower use

DEFINITION Discriminator - Allowable input values for the primary tower use.

<u>VALUE</u>	<u>DEFINITION</u>
CONTROL	A tower structure that is primarily used by an airport for air traffic control, etc.
FIRE	A tower structure that is primarily used to spot and manage forest fires, wildlife, etc.
OBSERVATION	A tower structure that is primarily used by the Armed Forces for observation of military exercises, equipment testing, tourism, etc.
TRAINING	A tower structure that is primarily used by the Armed Forces for jump training, rapelling, and training range management, etc.

DOMAIN NAME discriminator - utility guy

DEFINITION Discriminator - Values that differentiate the type of pole guy.

<u>VALUE</u>	<u>DEFINITION</u>
DOWN_GUY	down guy
SPAN_GUY	span guy

DOMAIN NAME discriminator - valve

DEFINITION Discriminator - Values that differentiate the types of water valves.

<u>VALUE</u>	<u>DEFINITION</u>
BACKFLOW	backflow preventer
POSTINDICATOR	post indicator gate valve
TAP	line tap
VALVE	valve

DOMAIN NAME discriminator - waste fitting

DEFINITION Various kinds of Storm Sewer, Waste, and Industrial Waste fittings.

<u>VALUE</u>	<u>DEFINITION</u>
CAP	pipe cap

CLEANOUT pipe cleanout

DOMAIN NAME discriminator - waste manhole

DEFINITION Discriminator - Values that differentiate the type of utility connection.

<u>VALUE</u>	<u>DEFINITION</u>
DISTRIB_BOX	distribution box
JUNCTION_BOX	junction box
MANHOLE	manhole

DOMAIN NAME discriminator - waste meter

DEFINITION Discriminator - Values that differentiate the type of waste water meter.

<u>VALUE</u>	<u>DEFINITION</u>
METER	meter
PARSHALL_FLUME	parshall flume meter

DOMAIN NAME discriminator - wastewater pump

DEFINITION Various kinds or types of wastewater pumps and stations.

<u>VALUE</u>	<u>DEFINITION</u>
EJECTOR	ejector system
PUMP	pump station

DOMAIN NAME discriminator - wastewater tank

DEFINITION Discriminator - Values that differentiate the type of wastewater tank.

<u>VALUE</u>	<u>DEFINITION</u>
DISPOSAL	disposal tank
SEPTIC_TANK	septic tank

DOMAIN NAME discriminator - water manhole

DEFINITION Discriminator - Values that differentiate the type of utility connection.

<u>VALUE</u>	<u>DEFINITION</u>
JUNCTION_BOX	junction box
MANHOLE	manhole
VALVE_PIT	valve pit

DOMAIN NAME discriminator - water pipe

DEFINITION Discriminator - Values that differentiate the general use of a water pipe.

<u>VALUE</u>	<u>DEFINITION</u>
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ABANDONED	abandoned/inactive pipe
FIRE	fire protection
MAIN	main line
RAW WATER	raw water line
SERVICE	building/facility service
SPRINKLER	sprinkler head

DOMAIN NAME disposition list - object

DEFINITION Allowable input for the disposition of an object

<u>VALUE</u>	<u>DEFINITION</u>
ABANDONED	abandoned in place (not in use)
INCOMPLETE	incomplete or unfinished
OTHER	other
PERMANENT	permanent
PROPOSED	proposed
TBD	to be determined
TEMPORARY	temporary
UNKNOWN	unknown

DOMAIN NAME hydrography - bank armor lining

DEFINITION Types of bank or bed armor lining in a waterway or a still body of water.

<u>VALUE</u>	<u>DEFINITION</u>
ASPHALT	asphalt
CEMENTD_STONE	cemented stones
CONCRETE_LINED	concrete lined
DUMP_BRICK_CONC	dumped brick and concrete
DUMPED_ROCK	dumped rocks
FORMEDLINING	formed channel lining
GABIONS	gabions
OTHER	other
PILEDIKE	pile dike
PLACED_STONE	placed stone
SAND_CEMNBGRR	sand cement/bag riprap
TBD	to be determined
UNKNOWN	unknown
WILLOW_MAT	willow mat

DOMAIN NAME hydrography - bed material

DEFINITION Types of material found in the bed of a waterway or a still body of water.

<u>VALUE</u>	<u>DEFINITION</u>
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AQUATCWEED	aquatic weed
CEMENTED_STONE	cemented stones
CLAY	clay
CONCRETE_LINED	concrete lined
CRSAND_GRAVEL	coarse sand and gravel
EXPOSED_ROCK	exposed rock
FINE_SAND	fine sand
GRASSED	grassed
GRAVEL_STONE	gravel to larger stone
ORGANIC_MUD	organic mud
OTHER	other
PLACED_STONE	placed stone
TBD	to be determined
UNDERBRUSH	underbrush
UNKNOWN	unknown

DOMAIN NAME hydrography - drainage density

DEFINITION Classification of the density of a hydrographic drainage pattern.

<u>VALUE</u>	<u>DEFINITION</u>
COARSE	coarse
FINE	fine
MEDIUM	medium
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME hydrography - drainage pattern

DEFINITION Types of hydrographic drainage patterns due to climatic, soil, and geologic conditions.

<u>VALUE</u>	<u>DEFINITION</u>
ANGULATE	angulate
ANNULAR	annular
ARTIFICIAL	artificial
BARBED	barbed
BRAIDED	braided
CENTRIPETAL	centripetal
COMPLEX	complex
COMPOUND	compound
CONTORTED	contorted
DENDRITANAST	dendritic anastomotic
DENDRITDISTR	dendritic distributary (dichotomic)

DENDRITPINNT	dendritic pinnate
DENDRITSUBDN	dendritic subdendritic
DERANGED	deranged
INTERNAL	internal
MULTIBSKARST	multibasinal karst
MULTIBSTHERM	multibasinal thermokarst
MULTIELNGBAY	multibasinal elongate bay
MULTIGLACLDS	multibasinal glacially disturbed
NODEVLSYSTEM	no developed system
OTHER	other
PALIMPSEST	palimpsest
PARLLCOLINER	parallel colinear
PARLLSUBPARL	parallel subparallel
PINNATE	pinnate
RADILCENTRIP	radial centripetal
RECTANGLARAN	rectangular angulate
TBD	to be determined
TRELISUBTREL	trellis subtrellis
TRELSDIRECTN	trellis directional
TRELSFAULT	trellis fault
TRELSJOINT	trellis joint
TRELSRECURVE	trellis recurved
UNKNOWN	unknown

DOMAIN NAME hydrography - drainage zone

DEFINITION Local name of assigned hydrographic drainage zones.

<u>VALUE</u>	<u>DEFINITION</u>
MERLIN	Merlin Drainage District
OTHER	other
TBD	to be determined
UNKNOWN	unknown
ZONE_1	zone 1

DOMAIN NAME material list - anodes

DEFINITION Allowable input values for anode material types.

<u>VALUE</u>	<u>DEFINITION</u>
AL	aluminum
CI	cast iron
GR	graphite
MG	magnesium

OTHER	other
TBD	to be determined
UNKNOWN	unknown
ZN	zinc

DOMAIN NAME material list - electric bus

DEFINITION Allowable material values for an electric bus.

<u>VALUE</u>	<u>DEFINITION</u>
ALUMINUM	aluminum metal
COPPER	copper metal
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME material list - electric cable

DEFINITION Allowable material values for electric cable.

<u>VALUE</u>	<u>DEFINITION</u>
AL	Al
ALUM_ALLOY	Al, alloy
ALUM_ANOD	Al, anodized
ALUM_COPPER	Al, Cu coated
ALUM_STEEL	Al, steel reinforced
COPPER	Cu
COPPER_ALLOY	Cu, alloy
COPPER_ALUM	Cu, Al coated
COPPER_LEAD	Cu, Pb coated
COPPER_NICKEL	Cu, Ni coated
COPPER_STEEL	Cu, steel coated
COPPER_TIN	Cu, tinned
FIBER_OPT	fiber optical
IRON	Fe
IRON_ALLOY	Fe, alloy
IRON_GALV	Fe, galvanized
LEAD	Pb
LEAD COPPER	Pb, Cu
LEAD_IRON	Pb, Fe
LEAD STEEL	Pb, steel
OTHER	other
STEEL	steel
STEEL_AL_CLAD	steel, Al clad

STEEL_CU_CLAD	steel, Cu clad
STEEL_GALV	steel, galvanized
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME material list - pipe

DEFINITION Allowable material values for pipe.

<u>VALUE</u>	<u>DEFINITION</u>
ABS	acrylonitrile butadiene styrene
AL	Aluminum
ASBESTCEMENT	asbestos cement
BLACK_FE	black iron
BRICK	brick
CASTIRON	cast iron
CEMENT	cement
COATWRAPSTEL	coated and wrapped steel
CONCRETE	concrete
CORR_METAL	corrugated metal
CORR_STEEL	corrugated steel
CORRALBITMEN	corrugated Aluminum with bituminous coating
CORRALPAVIN	corrugated Aluminum with paved invert
CORRMETLBITM	corrugated metal with bituminous coating
CORRMETPAVIN	corrugated metal with paved invert
CORRSTELBITM	corrugated steel with bituminous coating
CORRSTELPAVI	corrugated steel with paved invert
CORRUGATEDAL	corrugated Aluminum
CRESOTEDWOOD	creosoted wood
CU	Copper
DUCTILEFE	ductile iron
FIBER	fiber
FIBERGLASS	fiberglass
GALVANIZEDFE	galvanized iron
GALVNIZSTEEL	galvanized steel
GLASS	glass
HELIWOUND	helically wound
INSULATCONCR	insulating concrete
METAL	metal conduit
MULTIPLECLAY	multiple clay
MULTIPLTILE	multiple tile
OTHER	other
OTHERMASONRY	other

PLASTIC	plastic
POLYETHYLENE	polyethylene
POLYSTYRENE	polystyrene
PRECAST	precast
PRESTRESSED	prestressed
PVC	polyvinyl chloride
REINFORCONCR	reinforced concrete
REINFPLASMOR	reinforced plastic mortar
SINGLE_CLAY	single clay
SINGLE TILE	single tile
STEEL	steel
STEEL_WRAPED	steel wrapped
STONE	stone
TBD	to be determined
TERRACOTTA	terra cotta
TILE_RESIN	tile resin
UNKNOWN	unknown
VITRIFIDCLAY	vitriified clay
WROUGHT FE	wrought iron

DOMAIN NAME material list - pole

DEFINITION Allowable material values for poles and towers.

<u>VALUE</u>	<u>DEFINITION</u>
AL	Aluminum
CEMENT	cement
COMBINATION	combination of materials
CONCRETE	concrete
FIBERGLASS	fiberglass
GLASS	glass
OTHER	other
PLASTIC	plastic
REINFORCONCR	reinforced concrete, metal rods
STEEL	steel
TBD	to be determined
UNKNOWN	unknown
WOOD	wood

DOMAIN NAME method list - equipment cooling

DEFINITION Allowable method values for cooling equipment.

<u>VALUE</u>	<u>DEFINITION</u>
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AIR	air
FAN	fan
OIL	oil
OILAIR	oil and air (OA)
OILAIRFAN	oil, air, and fan (FA)
OTHER	other
REFRIGERATE	refrigeration units
TBD	to be determined

DOMAIN NAME name list - country

DEFINITION Names of local counties

<u>VALUE</u>	<u>DEFINITION</u>
CANADA	Canada
MEXICO	Mexico
OTHER	other
TBD	to be determined
USA	United States of America

DOMAIN NAME name list - fuel source

DEFINITION Allowable input values for fuel sources.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME name list - gas source

DEFINITION Allowable input values for natural and bottle gas sources.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME name list - laboratory

DEFINITION Names of testing and analysis laboratories.

<u>VALUE</u>	<u>DEFINITION</u>
LAW_ENG	Law Engineering
LAW_ENV	Law Environmental
OTHER	other
TBD	to be determined

UNKNOWN	unknown
WES	Waterways Experiment Station

DOMAIN NAME name list - lagoon

DEFINITION Allowable input for a lagoon name

<u>VALUE</u>	<u>DEFINITION</u>
5	lagoon #5
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME name list - owner

DEFINITION Allowable input values for an owner name

<u>VALUE</u>	<u>DEFINITION</u>
BCE	Base Civil Engineer
DPWE	Directorate of Public Works and Environment
GA P	Georgia Power
MISS_P_L	Mississippi Power and Light
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME name list - reservoir

DEFINITION Allowable input values for reservoir names

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME name list - treatment plant

DEFINITION Allowable input values for treatment plant names.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME name list - water source

DEFINITION Allowable input values for names of water sources.

<u>VALUE</u>	<u>DEFINITION</u>
ART_WELL_7	Artisan Well #7
FEDERALES	Arroyo Federales
LAFUCHE	Bayou LaFouche
MAGEES CREEK	Magees Creek
OTHER	other
TBD	to be determined
TYLERTOWN	Tylertown Wellfield
UNKNOWN	unknown

DOMAIN NAME project - status

DEFINITION Various status result of projects.

<u>VALUE</u>	<u>DEFINITION</u>
ACTIVE	active - project in progress
CANCELLED	project cancelled terminated
COMPLETED	project completed
INACTIVE_PIN	active - project permanently halted
INACTIVE_TIN	active - project temporarily halted
PROPOSED	proposed project
TBD	to be determined

DOMAIN NAME size list - ductbank

DEFINITION Allowable input values for ductbank size.

<u>VALUE</u>	<u>DEFINITION</u>
NA	not applicable
TBD	to be determined
UNK	unknown

DOMAIN NAME soils - erosion K

DEFINITION The susceptibility of the soil to erosion

<u>VALUE</u>	<u>DEFINITION</u>
0.02	0.02
0.05	0.05
0.10	0.10
0.17	0.17
0.20	0.20

0.24	0.24
0.28	0.28
0.32	0.32
0.37	0.37
0.43	0.43
0.49	0.49
0.55	0.55
0.64 OR MORE	0.64 or more
0_02	0.02
0_05	0.05
0_10	0.10
0_17	0.17
0_20	0.20
0_24	0.24
0_28	0.28
0_32	0.32
0_37	0.37
0_43	0.43
0_49	0.49
0_55	0.55
0_64_OR_MORE	0.64 or more
TBD	to be determined
UNKNOWN	unk

DOMAIN NAME soils - family

DEFINITION Scientific taxonomic classification of the soil

<u>VALUE</u>	<u>DEFINITION</u>
ALTAVISTA	fine-loamy, mixed, thermic Aquic Hapludults
AUTRYVILLE	loamy, siliceous, thermic Arenic Paleudults
AYCOCK	fine-silty, siliceous, thermic Typic Paleudults
BLANEY	loamy, siliceous, thermic Arenic Hapludults
BRAGG	fine-loamy, siliceous, acid, thermic Typic Udorthents
BUTTERS	coarse-loamy, siliceous, thermic Typic Paleudults
BYARS	clayey, kaolinitic, thermic Umbric Paleaquults
CANDOR	sandy, siliceous, thermic Arenic Paleudults
CAPEFEAR	clayey, mixed, thermic Typic Umbraquults
CHEWACLA	fine-loamy, mixed, thermic Fluvaquentic Dystrochrepts
COXVILLE	clayey, kaolinitic, thermic Typic Paleaquults
CRAVEN	clayey, mixed, thermic Aquic Hapludults
CROATAN	loamy, siliceous, dysic, thermic Terric Medisaprists
DELOSS	fine-loamy, mixed, thermic Typic Umbraquults

DOGUE	clayey, mixed, thermic Aquic Hapludults
DOTHAN	fine-loamy, siliceous, thermic Plinthic Paleudults
DUNBAR	clayey, kaolinitic, thermic Aeric Paleaquults
DUPLIN	clayey, kaolinitic, thermic Aquic Paleudults
DYSTROCHREPT	loamy, thermic Dystrochrepts
EXUM	fine-silty, siliceous, thermic Aquic Paleudults
FACEVILLE	clayey, kaolinitic, thermic Typic Paleudults
FUOUAY	loamy, siliceous, thermic Arenic Plinthic Paleudults
GILEAD	clayey, kaolinitic, thermic Aquic Hapludults
GOLDSBORO	fine-loamy, siliceous, thermic Aquic Paleudults
GRANTHAM	fine-silty, siliceous, thermic Typic Paleaquults
JOHNSTON	coarse-loamy, siliceous, acid, thermic Cumulic Humaquepts
KALMIA	fine-loamy over sandy or sandy skeletal, siliceous, thermic Typic Hapludults
KENANSVILLE	loamy, siliceous, thermic Arenic Hapludults
KUREB	thermic, uncoated Spodic Quartzipsamments
LAKELAND	thermic, coated Typic Quartzipsamments
LENOIR	clayey, mixed, thermic Aeric Paleaquults
LEON	sandy, siliceous, thermic Aeric Haplaquods
LYNCHBURG	fine-loamy, siliceous, thermic Aeric Paleaquults
LYNNHAVEN	sandy, siliceous, thermic Typic Haplaquods
MCCOLL	clayey, kaolinitic, thermic Typic Fragiaquults
NAHUNTA	fine-silty, siliceous, thermic Aeric Paleaquults
NORFOLK	fine-loamy, siliceous, thermic Typic Paleudults
OTHER	other
PACTOLUS	thermic, coated Aquic Quartzipsamments
PANTEGO	fine-loamy, siliceous, thermic Umbric Paleaquults
RAINS	fine-loamy, siliceous, thermic Typic Paleaquults
ROANOKE	clayey, mixed, thermic Typic Ochraquults
STALLINGS	coarse-loamy, siliceous, thermic Aeric Paleaquults
TARBORO	mixed, thermic Typic Udipsamments
TBD	to be determined
TORHUNTA	coarse-loamy, siliceous, acid, thermic Typic Humaquepts
UNKNOWN	unknown
VAUCLUSE	fine-loamy, siliceous, thermic Typic Hapludults
WAGRAM	loamy, siliceous, thermic Arenic Paleudults
WAHEE	clayey, mixed, thermic Aeric Ochraquults
WICKHAM	fine-loamy, mixed, thermic Typic Hapludults
WOODINGTON	coarse-loamy, siliceous, thermic Typic Paleaquults

DOMAIN NAME soils - texture

DEFINITION Soil texture and composition.

<u>VALUE</u>	<u>DEFINITION</u>
BOLDGRAVEL	boulder gravel
CLAY	clay
CLAYLOAM	clay loam
COARSANDYLOM	course sandy loam
COARSESAND	coarse sand
COARSESILT	coarse silt
CORSCOBLGRAV	coarse cobble gravel
CORSPBLGRAVL	coarse pebble gravel
FINCOBLGRAV	fine cobble gravel
FINEPBLGRAVL	fine pebble gravel
FINESAND	fine sand
FINESANDYLOM	fine sandy loam
FINESILT	fine silt
GRAVEL	gravel
LOAM	loam
LOAMCOARSAND	loamy course sand
LOAMFINESAND	loamy fine sand
MEDCOBLGRAVL	medium cobble gravel
MEDIUMSAND	medium sand
MEDIUMSILT	medium silt
MEDPEBLGRAVL	medium pebble gravel
OTHER	other
PERMAFROST	permafrost
SANDYCLAY	sandy clay
SANDYCLAYLOM	sandy clay loam
SANDYLOAM	sandy loam
SILTYCLAY	silty clay
SILTYLOAM	silty loam
SLITYCLAYLOM	silty clay loam
STONES	stones
TBD	to be determined
UNKNOWN	unknown
VERYCOARSAND	very coarse sand
VERYFINESAND	very fine sand
VERYFINESILT	very fine silt
VRYCRSPBGRVL	very coarse pebble gravel
VRYFINPBLGRV	very fine pebble gravel

VRYFINSANLOM very fine sandy loam

DOMAIN NAME source list - fuel gas

DEFINITION Allowable input values for fuel/gas sources.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME status list - electric switch

DEFINITION Allowable input values for the status of an electrical switch.

<u>VALUE</u>	<u>DEFINITION</u>
CLOSED	closed
CLOSEDCLOSED	closed - normally closed
CLOSEDOPEN	closed - normally open
OPEN	open
OPENCLOSED	open - normally closed
OPENOPEN	open - normally open
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME status list - manhole

DEFINITION Allowable input values for the status of a manhole.

<u>VALUE</u>	<u>DEFINITION</u>
ACTIVE	active and working
NONACTIVE	not being used
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME status list - owner

DEFINITION Allowable input values for the owner status

<u>VALUE</u>	<u>DEFINITION</u>
LEASED	leased
NA	not applicable
OCCUPIED	occupied
OTHER	other
OWNED	owned
RENTED	rented

TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME structure - architecture style

DEFINITION Architectural period/style of a building/structure.

<u>VALUE</u>	<u>DEFINITION</u>
ARTDECO	Modern movement - Art Deco
BEAUXARTS	late 19/20th - Beaux Arts
BUNGALOW	late 19/20th U.S. - Bungalow
CHICAGO	late 19/20th U.S.-Chicago
CLASSIC	late 19/20th Classical Revival
COLONIAL	late 19/20th Colonial Revival
COLONIAL_01	Colonial - unspecified
COLONIAL_02	New England Colonial
COLONIAL_03	Southern Colonial
COLONIAL_04	Spanish Colonial
COLONIAL_05	Dutch/Flemish Colonial
COLONIAL_06	Early Georgian Colonial
COLONIAL_07	Late Georgian Colonial
COLONIAL_08	French Colonial
COLONIAL_09	Colonial postmedieval English
COMMERCIAL	late 19/20th U.S. Commercial
CUMBERLAND	Cumberland
EASTLAKE	late Victorian/stick Eastlake
EGYPT	Egyptian Revival
EXOTIC	mid 19th Exotic Revival
FEDERAL	Early Republic/Federal
FRENCH	late 19/20th French RenaissReviv
GEORGIAN	Georgian Revival
GOTHIC_01	late Victorian Gothic
GOTHIC_02	mid 19th Gothic Revival
GOTHIC_03	early 19th Gothic Revival
GOTHIC_04	late 19/20th Gothic Revival
GREEK	mid 19th Greek Revival
IHOUSE	Southern I House
INTERNATIONL	Modern movement - International
ITALIAN	late 19/20th Italian RenaisReviv
ITALIANATE	late Victorian Italianate
ITALIANVILLA	mid 19th Italian Villa
LOGHOUSE	Log Dwelling
MISSION SPANISH	late 19/20th Spanish Revival

MIXED	Mixed
MODERNE	Modern movement - Moderne
MOORISH	Moorish Revival
NEOCLASSIC	Neoclassical Revival
NONE	no style listed
OCTAGON	mid 19th Octagon
OTHER	other
PEN_01	Single Pen
PEN_02	Double Pen
PLANTATION	Lowland South Plantation
PRAIRIE	late 19/20th U.S. Prairie School
PUEBLO	late 19/20th U.S. Pueblo Revival
QUEENANNE	late Victorian - Queen Anne
RANCH	Modern movement - Ranch
REGENCY	Regency
REPUBLIC	Early Republic/Early Classic Revival
REVIVAL	mid-19th Century Revival
ROMANESQUE	late Victorian - Romanesque
SHINGLE	late Victorian - Shingle
SHOTGUN	Shotgun
SKYSCRAPER	late 19/20th U.S. Skyscraper
SULLIVAN	late 19/20th U.S. Sullivan
TBD	to be determined
TUDOR	late 19/20th Tudor Revival
TUDORELIZA	Tudor/Elizabethan
UNKNOWN	unknown
VICTEMPIRE2	late Victorian - Second Empire
VICTORIAN	Late Victorian
VICTRENAISS	late Victorian - Renaissance
WESTERN	Western Stick

DOMAIN NAME structure - condition

DEFINITION Structural condition and state of repair of a building/structure.

<u>VALUE</u>	<u>DEFINITION</u>
BOARDEDUP	boarded up
BROKENNOUSE	broken and unusable
BURNTNOUSE	burnt and not useable
BURNTUSEABLE	burnt but useable
CONDEMNED	condemned
CRACKED	cracked
DAMAGED	damaged

DAMAGEHEVUSE	heavily damage, but useable
DAMAGELITUSE	light damage, but useable
DAMAGEMODUSE	moderate damage, but useable
DAMAGHEVNO	heavy damage, and unusable
DAMAGLITNO	light damage, and unusable
DAMAGMODNO	moderate damage, and unusable
DANGEROUS	dangerous to use
GOODNOTNEW	good, but not new
HABITABLE	habitable
HABITABLENO	not habitable
MINORUSE	minor use
NEWLYBUILT	newly built
NEWUNFINISH	newly built, but not yet finished
NOTRESPASSNG	no trespassing
POOR	poor
QUARANTINED	quarantined
RADIOACTIVE	radioactive
TBD	to be determined
UNKNOWN	unknown
USEABLE	useable
USEABLENO	not useable

DOMAIN NAME structure - material

DEFINITION Basic material used for the construction of the frame and walls of a building/structure.

<u>VALUE</u>	<u>DEFINITION</u>
AL	Aluminum
BRICK	brick
BUILTUP	builtup
CANVAS	canvas
CARDBOARD	cardboard
CEMENT	cement
CEMENTBLOCK	cement block
CINDERBLOCK	cinder block
COMBINATION	combination of materials
CONCRETBLOCK	concrete block
CONCRETE	concrete
CONCRETEPILE	concrete pile
EARTHEN	earthen, dirt
FIBERGLASS	fiberglass
GLASS	glass
GLASSBLOCK	glass block

GRASS	grass
HIDES	hides
LOGS	logs
METAL	metal
OTHER	other
PLASTIC	plastic
SHEETMETAL	sheet metal
SNOW	snow
STEEL	steel
STEELPILE	steel pile
STONE	stone
STYROFOAM	styrofoam
TBD	to be determined
TILE	tile
WOOD	wood
WOODENPILE	wooden pile

DOMAIN NAME structure - use

DEFINITION Normal use of a building/structure.

<u>VALUE</u>	<u>DEFINITION</u>
ABANDONED	abandoned in place
ADMINISTRATE	administration
AGRICULTURE	agricultural
COMMERCIAL	commercial
COMMUNCOMMR	community commercial
COMMUNICATE	communications
COMMUNSERVE	community service
ELECTRICAL	electrical
EXPLOSIVSTOR	explosive storage
GENERALSTORE	general storage
GOVERNMENTAL	governmental
HAZARDMATERL	hazardous material storage
HAZARDWASTE	hazardous waste storage
HOUSEACCOMP	housing - accompanied
HOUSEALONE	housing - unaccompanied
INDUSTRIAL	industrial
LABORATORY	laboratory
LAUNCHCONTRL	launch control
LAUNCHSUPPORT	launch support
MANUFACT	manufacturing
MEDICAL	medical

MOTORPOOL	motor pool (vehicles)
OTHER	other
RELIGIOUS	religious
REPAIR	repair and maintenance shops
RESIDENTIAL	residential
SANITARY	sanitary
SOCIAL	social
TBD	to be determined
TEMPLVACOM	temporary living facility - accompanied
TEMPLVSOLO	temporary living facility - unaccompanied
TRAINING	training
VACANT	vacant
WATERFACILTY	water facilities

DOMAIN NAME style list - drain field

DEFINITION Allowable input values for styles of drain fields.

<u>VALUE</u>	<u>DEFINITION</u>
FAN	fan drain field
NETWORK	network drain field
OTHER	other
SEEP_PIT	seepage pit
TBD	to be determined
TILE	tile field
UNKNOWN	unknown

DOMAIN NAME style list - gates

DEFINITION Allowable input values for styles of flow gates.

<u>VALUE</u>	<u>DEFINITION</u>
FLAP	flap gate
LIFT	lift gate
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME style list - open channel

DEFINITION Allowable input values for styles of open drainage channels.

<u>VALUE</u>	<u>DEFINITION</u>
CANALCMLPSEC	canal complex section
CANALTRPZSEC	canal trapezoidal section
LAKE	lake

OPENDRAINAGE	open drainage
OTHER	other
PAVEDDITCH	paved ditch
PAVEDINVRTDR	paved invert drain
POND	pond
RIVER	river
STORMWATER	storm water retention reservoir
SWALE	swale
TBD	to be determined
UNKNOWN	unknown
UNPAVEDITCH	unpaved ditch

DOMAIN NAME style list - tank

DEFINITION Allowable input values for styles of storage tanks.

<u>VALUE</u>	<u>DEFINITION</u>
ABOVEGROUND	A receptacle or chamber of which 90 percent or more is located above the surface of the ground.
DRAINSUMP	drain sump tank
ELEVATED	elevated
HYDROPNEU	hydropneumatic
OTHER	other
SCP	self contained propane gas tank
STANDPIPE	standpipe
TBD	to be determined
UNCONFNDRESV	unconfined reservoir
UNDERGROUND	A receptacle or chamber of which 10 percent or more is located beneath the surface of the ground.
UNKNOWN	unknown

DOMAIN NAME style list - valve

DEFINITION Allowable input values for styles of valves.

<u>VALUE</u>	<u>DEFINITION</u>
ANGLE	angle
BALL	ball
BUTTERFLY	butterfly
CHECK	check
DRYPIPE	dry pipe
GATE	gate
GLOBE	globe
NEEDLE	needle
OTHER	other
OTHERPOSTIND	other post indicator

PLUG	plug
PRESSREDUCNG	pressure reducing
PRESSRELIEF	pressure relief
OUAD	quad
REGULATING	regulating
STOP WASTE	stop and waste
SWINGCHECK	swing check
TBD	to be determined
TRIPLEDUTY	triple duty
UNKNOWN	unknown

DOMAIN NAME type list - address

DEFINITION Type of address (e.g., Business, Home, Place of Birth).

<u>VALUE</u>	<u>DEFINITION</u>
ALT BUSINESS	address of alternate business
ALT_HOME	address of alternate home
BIRTHPLACE	address of place of birth
BUSINESS	address of business of record
HOME	address of home of record
OTHER	other address
PREV_BUSINESS	address of previous business
PREV_RESIDENCE	address of previous residence
REL_BUSINESS	address of business of an individual family relation
REL_HOME	address of home of an individual family relation
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - anode test station

DEFINITION Allowable input values for types of anode test station.

<u>VALUE</u>	<u>DEFINITION</u>
CONDULET_POLE	condulet and pole mount (above ground)
FLUSH_GRADE	flush to grade (in ground)
OTHER	other
STD_REFCL_JNCBX	Standard Reference Cell Junction Box
STD_RESIS_JNCBX	Standard Resistor Junction Box
STD_SHNT_JNCBX	Standard Shunt Junction Box
STD_TERM_JNCBX	Standard Terminal Junction Box
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - culvert screen

DEFINITION Allowable input values for types of culvert screens.

<u>VALUE</u>	<u>DEFINITION</u>
HORZBAR	horizontal bar/pipe
OTHER	other
TBD	to be determined
UNKNOWN	unknown
VERTBAR	vertical bar/pipe

DOMAIN NAME type list - diameter measure

DEFINITION Allowable input values for the way diameter is measured.

<u>VALUE</u>	<u>DEFINITION</u>
INSIDE	inside diameter
NOMINAL	nominal or average diameter
OTHER	other
OUTSIDE	outside diameter
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - display

DEFINITION Allowable input values for types of displays

<u>VALUE</u>	<u>DEFINITION</u>
ANALOG	analog (dial) display
DIGITAL	digital display
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - drain

DEFINITION Allowable input values for type of drains.

<u>VALUE</u>	<u>DEFINITION</u>
FAN	fan
NETWORK	network
OTHER	other
SEALED	sealed
SEEPAGEPIT	seepage pit
STORMCONNECT	connected to storm system
SUBDRAIN	sub drain (French drain)

SUMPPUMP	sump pump
TBD	to be determined
TILEFIELD	tile field

DOMAIN NAME type list - ecm device

DEFINITION Allowable input values for types of energy monitoring/control devices.

<u>VALUE</u>	<u>DEFINITION</u>
FIELD_INTERFC	field interface
MULTIPLEX	multiplexer

DOMAIN NAME type list - effluent discharge

DEFINITION Allowable input values for types of effluent discharge.

<u>VALUE</u>	<u>DEFINITION</u>
DRAIN	drainage field
OPEN	open discharge point
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - electric cable

DEFINITION Allowable input values for types of electrical cable.

<u>VALUE</u>	<u>DEFINITION</u>
1_WIRE	1-wire, single conductor
3_WIRE_PRKWY	3-wire parkway
3_WIRE_ROUND	3-wire, round
3_WIRE_SGMNT	3-wire, segmental
4_WIRE_ROUND	4-wire, quad conductor
COAX	coaxial
DUPLEX	2-wire, dual conductor
OTHER	other
SOLIDCORE	solid core
SOLIDCORETB	solid core-twisted bundle around
SOLIDCORETS	solid core-twisted strand around
SOLIDIELEC	solid dielectric
TBD	to be determined
TS	twisted strands
TSCORE	twisted strands core
UNKNOWN	unknown

DOMAIN NAME type list - electric config

DEFINITION Allowable input values for types of electrical cable mounting configurations on the pole or tower.

<u>VALUE</u>	<u>DEFINITION</u>
ARMLESS	The cable group is mounted in a cluster at the top of the pole.
CROSSARM EOL	The individual line mounts in a cable group are equally spaced on a standard length crossarm.
CROSSARM_UNEQL	The individual line mounts in a cable group are not equally spaced on a standard crossarm.
OTHER	other
SHORTARM	The individual line in a cable group are mounted on a cross arm less than 24-inches long.
TBD	to be determined
UNKNOWN	unknown
VERTICAL	The individual line mounts in a cable group are vertically spaced down the pole.

DOMAIN NAME type list - electric control

DEFINITION Allowable input values for types of electrical controls.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - electric meter

DEFINITION Allowable input values for types of electric meters.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - electric motor encl

DEFINITION Allowable input values for types of electric motor enclosures.

<u>VALUE</u>	<u>DEFINITION</u>
AIR/AIR	totally enclosed, air-to-air cooled
AIR_OVER	totally enclosed, air-over
DUST PROOF	totally enclosed, dust-ignition proof
ENCL_FAN	totally enclosed, fan cooled
ENCL_FANG	totally enclosed, fan cooled, guarded
ENCL_NON	totally enclosed, nonventilated
ENCL_WAC	totally enclosed, water/air cooled
ENCL_WATER	totally enclosed, water cooled
EXPL PROOF	totally enclosed, explosion proof

OPEN	open
OPEN_DGUARD	open, drip-proof guarded
OPEN_DP	open, drip-proof
OPEN_EV	open, externally ventilated
OPEN_GUARD	open, guarded
OPEN_PVENT	open, pipe ventilated
OPEN_SG	open, semiguarded
OPEN_SP	open, splash-proof
OPEN_WEATI	open, weather protected - Type I
OPEN_WEATHI	open, weather protected - Type II
OTHER	other
PIPE_VENT	totally enclosed, pipe ventilated
TBD	to be determined
UNKNOWN	unknown
WATER_PROOF	totally enclosed, water-proof

DOMAIN NAME type list - electric motor insul

DEFINITION Allowable input values for types of electric motor insullation.

<u>VALUE</u>	<u>DEFINITION</u>
A	IEEE Std 1, 60- 70 deg C.
B	IEEE Std 1, 80- 90 deg C.
F	IEEE Std 1, 105- 115 deg C.
H	IEEE Std 1, 125- 135 deg C.
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - electric motor start

DEFINITION Allowable input values for types of electric motor starters.

<u>VALUE</u>	<u>DEFINITION</u>
AUTOTRN_STRT	autotransformer start
CAPCTR_RUN	capacitor run
CAPCTR_STRT	capacitor start
LINE_STRT	line start
OTHER	other
REACTR_REDUV	reactor type, reduced voltage
RESIST_REDUV	resistor type, reduced voltage
SHADED_POLE	shaded pole
SOLDSTATSTRT	solid state start
TBD	to be determined

UNKNOWN unknown
 Y_STRT_D_RUN Y start delta run

DOMAIN NAME type list - electric phase

DEFINITION Allowable input values for electric phases.

<u>VALUE</u>	<u>DEFINITION</u>
A	A phase
AB	AB phase
ABC	ABC phase
AC	AC phase
B	B phase
BC	BC phase
C	C phase
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - electric switch

DEFINITION Allowable input values for types electric switches.

<u>VALUE</u>	<u>DEFINITION</u>
DISCONNECT	disconnect
ISO	ISO switch
OIL	oil switch
OTHER	other
RAC6WOIL	RAC 6way oil switch
RACOIL	RAC oil switch
RAMOIL	RAM oil switch
SOLIDBLADISC	solid blade disconnect
TBD	to be determined
UNKNOWN	unknown
VACUUM	vacuum

DOMAIN NAME type list - electric transformer

DEFINITION Allowable input values for types of electric transformers.

<u>VALUE</u>	<u>DEFINITION</u>
DRYMOUNTED	step-down uti. dist. trans, dry type, 4160 to 480/277 volts, 3-phase, utility voltages to commercial buildings and plants, for large appliances and large motors
OTHER	other
PADMOUNTED	stepdown pad mounted trans. dry type, 30K to 4,160K volts, 3-phase, distribution voltage to utility, pole mounted residential transformers or dry mounted commercial, utility transformers
POLEMOUNTED	stepdown util. dist. trans. liq. filled, 4160 to 120/240 volts, 1-phase, utility voltages to residences and small shops, for small appliances and small motors

STEPDOWN	stepdown substation trans. liq. filled, 450K to 30K volts, 3-phase, distribution voltage to step-down pad mounted transformer
STEPUP	stepup power station trans. liq. filled, 30K to 450K volts, 3-phase, transmission voltage to utility substation
SUBMERSIBLE	Transformers used in some underground systems installed in residential areas.
TBD	to be determined
UNKNOWN	unknown
VAULT	Transformers installed for commercial customers where adequate space is not available for pad mounted transformers.

DOMAIN NAME type list - electric volt regul

DEFINITION Allowable input values for types of electric voltage regulators.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown
VOLTREG_1	1-phase, 7.5-19.9 Kvs, 50-418 amps, 7.6-19.9 Kva, metered or digital parameters, multiple microprocessor controlled step-voltage regulator.
VOLTREG_3	3-phase, 13-34 Kvs, 220-445 amps, 500-2670 Kva, metered or digital parameters, multiple microprocessor controlled step-voltage regulator.

DOMAIN NAME type list - event

DEFINITION Allowable input values for an event type.

<u>VALUE</u>	<u>DEFINITION</u>
BEGIN	beginning event
END	ending event
INDEPENDENT	independent (unassociated) event
INTERMEDIATE	intermediate event
MIDPOINT	midpoint event
OTHER	other
PAUSE	pause event
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - fitting

DEFINITION Allowable input values for types of fittings.

<u>VALUE</u>	<u>DEFINITION</u>
ANGLE	pipe angle
CAP	pipe cap
CLEANOUT	pipe cleanout
CROSS	pipe cross
ELBOW	pipe elbow

FLANGE	pipe flange
PLUG	pipe plug
REDUCER	pipe pressure reducer
TEE	pipe tee

DOMAIN NAME type list - fuel gas

DEFINITION Allowable input values for types of fuel or gas.

<u>VALUE</u>	<u>DEFINITION</u>
ANTIFREEZE	antifreeze
AVGAS	aviation gas
BUTANEGAS	butane gas
COALGAS	coal gas
DIESELFUEL	diesel fuel
EMPTY	empty
ETHANEGAS	ethane gas
ETHANOL	ethyl alcohol
FUELOIL4	fuel oil - no. 4
FUELOIL6	fuel oil - no. 6
GASOLINE	gasoline
HYDRAULICFLD	hydraulic fluid
JP4FUEL	jet fuel 4
JP5FUEL	jet fuel 5
JP8FUEL	jet fuel 8
KEROSENE	kerosene
LQNATURALGAS	liquified natural gas
LQPETROGAS	liquified petroleum gas
LQPROPANEGAS	liquified propane gas
METHANEGAS	methane gas
METHANOL	methyl alcohol
MINERALOIL	mineral oil
MOGAS	mogas
MOTOROIL	motoroil
NATGAS	natural gas
OTHER	other
PROPANEGAS	propane gas
TBD	to be determined
TRANSMISNFLD	transmission fluid
UNKNOWN	unknown
WASTE OIL	waste oil
WASTEPOLLUTE	waste pollutants

DOMAIN NAME type list - fuel meter

DEFINITION Allowable input values for types of fuel meters.

<u>VALUE</u>	<u>DEFINITION</u>
DUALCASE	pump/rotary/vanes - case in case - normal terminal
GEARCASE	metal gears - positive displacement - normal bulk plant
OTHER	other
PISTON	pump/3 piston/chamber - normal service station
ROTARY	pump/rotary/vanes - normal bulk plant
ROTARYIMPLER	rotary impeller - pressure driven - normal pipeline
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - fuel source

DEFINITION Allowable input values for types of fuel sources.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - gas fixture

DEFINITION Allowable input values for types of gas fixtures.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - gas meter

DEFINITION Allowable input values for types of gas meters.

<u>VALUE</u>	<u>DEFINITION</u>
DIAPHRAGM	diaphragm - positive displacement - normal residence
ORIFICE	orifice - pressure drop across plate - city gate, transmission company
OTHER	other
ROTARY	rotary - impeller driven - normal commercial, industrial
TBD	to be determined
TURBINE	turbine - turbine driven, continuous flow - normal industrial
UNKNOWN	unknown

DOMAIN NAME type list - generator

DEFINITION Allowable input values for types of generators.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - heating-cooling

DEFINITION Allowable input values for the types of heating and cooling systems.

<u>VALUE</u>	<u>DEFINITION</u>
CHW	chilled water: water less than 45 deg. F.
HTW CHW	high temp - chilled water
LTW	low temperature water: water less than 250 deg. F.
LTW CHW	low temp - chilled water
OTHER	other
S	steam
S_CHW	steam - chilled water
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - hydrant

DEFINITION Allowable input values for type of hydrants.

<u>VALUE</u>	<u>DEFINITION</u>
AIRPORT	airport hydrant
BUILDING	building hydrant
DRINKFOUNT	drinking fountain
DRYBARREL	dry barrel
FREEZEPROOF	freeze proof
FUEL	fuel hydrant
NATGAS	natural gas hydrant
OTHER	other
STREETWASH	street washer
TBD	to be determined
UNKNOWN	unknown
WASHRACK	wash rack hydrant
WATER	water hydrant
WETBARREL	wet barrel
YARD	yard hydrant

DOMAIN NAME type list - laboratory

DEFINITION Allowable input values for types of laboratories

<u>VALUE</u>	<u>DEFINITION</u>
CHEMICAL	chemical testing laboratory
ENVIRONMENTAL	environmental testing laboratory
GEOTECHNICAL	geotechnical (soils and rock) testing laboratory
OTHER	other
STRUCTURAL	structural testing laboratory
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - lagoon

DEFINITION Allowable input values for types of lagoons

<u>VALUE</u>	<u>DEFINITION</u>
LINED_FAB	lagoon with geotextile liner
LINED_SOIL	lagoon with soil liner
OTHER	other
TBD	to be determined
UNKNOWN	unknown
UNLINED	lagoon with out engineering designed liner

DOMAIN NAME type list - manhole

DEFINITION Allowable input values for type of manhole/pit/junction box.

<u>VALUE</u>	<u>DEFINITION</u>
ABOVEGROUND	above ground
DIST_BOX	distribution box
DRAINPIT	drain pit
OTHER	other
PIT	pit
SEEPAGEPIT	seepage pit
SUMP	sump
TBD	to be determined
UNDERGROUND	under ground
UNKNOWN	unknown

DOMAIN NAME type list - manhole liner

DEFINITION Types of liners used in neutralizing pits.

<u>VALUE</u>	<u>DEFINITION</u>
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GLASS	glass liner
OTHER	other
PLASTIC	plastic liner
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - motor

DEFINITION Allowable input values for type of electrical motor.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - oil/water separator

DEFINITION Allowable input values for type of oil-water separators.

<u>VALUE</u>	<u>DEFINITION</u>
API	API standard
CEMENT	cement
CONCRETE	concrete
FIBERGLASS	fiber glass
OTHER	other
PARALELPLATE	parallel plate
POLYURETHANE	polyurethane
REINFORCONCR	reinforced concrete
STEEL1	steel single
STEEL2	steel double
STEELENCASED	steel encased
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - owner

DEFINITION Allowable input values for types of owners

<u>VALUE</u>	<u>DEFINITION</u>
CABLETV	cable television company
CINEMA	motion picture company
COMMERCIAL	commercial
COMPOSTGOVRN	composting company - government
COMPOSTPRIVT	composting company - private
DISPOSALGOVR	disposal company - government
DISPOSALPRIV	disposal company - private

ELECTRIC	electric company
FUEL	fuel company
GOV_CITY	government - city
GOV_COUNTY	government - county
GOV_FEDERAL	government - federal
GOV_PARISH	government - parish
GOV_STATE	government - state
NATGAS	natural gas company
OTHER	other
PRIVATECOMP	private company
PRIVATEINDIV	private individual
RADIO	radio company
RADIO_TV	radio/television company
RECYCLEGOVRN	recycling plant - government
RECYCLEPRIVT	recycling plant - private
TBD	to be determined
TELEPHONE	telephone company
TELEVISION	television company
UNKNOWN	unknown
WASTEWATER	waste water company
WATER	water company

DOMAIN NAME type list - pipe

DEFINITION Allowable input values for type of pipe.

<u>VALUE</u>	<u>DEFINITION</u>
BOX	box
CIRCULAR	circular
OTHER	other
OVALONGAXHRZ	oval long axis horizontal
OVALONGAXVRT	oval long axis vertical
PERFORATPIPE	perforated pipe
PIPEARCH	pipe arch
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - pole cable

DEFINITION Allowable input values for type of pole cable.

<u>VALUE</u>	<u>DEFINITION</u>
18_7_FC	18x7 FC
19_7	19x7

3_19_FLUSHER	3x19 slusher
3_7_GRD_RAIL	3x7 guard rail
5_19_CLAD	5x19 marlin clad FC
6_12_FILLER_FC	6x12 filler wire FC
6_12_GALV_FC	6x12 galvanized running rope FC
6_19_CLAD	6x19 marlin clad
6_19_SEALE_IWRC	6x19 Seale IWRC
6_24_HAWSER	6x24 hawser
6_25_FILL_IWRC	6x25 filler wire IWRC
6_25B_FLAT_FC	6x25B flattened strand FC
6_26_WARR_IWRC	6x26 Warrington Seale IWRC
6_27H_FLAT_FC	6x27H flattened strand FC
6_3_19_SPRING	6x3x19 spring lay
6_30_HAWSER	6x30 hawser
6_30G_FLAG_FC	6x30G flattened strand FC
6_31_FILL_IWRC	6x31 filler wire IWRC
6_31_WARR_IWRC	6x31 Warrington Seale IWRC
6_36_SEALE_IWRC	6x36 Seale filler wire IWRC
6_36_WARR_IWRC	6x36 Warrington Seale IWRC
6_41_SEALE_IWRC	6x41 Seale filler wire IWRC
6_41_WARR_IWRC	6x41 Warrington Seale IWRC
6_42_TILLER_FC	6x42 tiller rope FC
6_46_SEALE_IWRC	6x46 Seale filler wire IWRC
6_49_FILL_FC	6x49 filler wire Seale FC
6_6_7_TILLER	6x6x7 tiller rope
6_7_FC	6x7 FC
8_19_SEALE_FC	8x19 Seale FC
8_25_FILLER_IWR	8x25 filler wire IWRC
8_9_SEALE_IWRC	8x9 Seale IWRC
BARE	bare
DUPLEX	duplex
EHS	Extra High Strength Steel
EIP	Extra Improved Plow Steel
FC	FiberCore
FE	Iron
HSS	High Strength Steel
IPS	Improved Plow Steel
IWRC	Independent Wire Rope Core
MPS	Mild Plow Steel
OTHER	other
PRIMARY	primary
PS	Plow Steel

SECONDARY	secondary
TBD	to be determined
TRIPLEX	triplex
TS	Traction Steel
UNKNOWN	unknown
WEATHRPROFCU	weatherproofed-Copper
WSC	Wire-Strand Core

DOMAIN NAME type list - pole treatment

DEFINITION Treatments applied to poles to improve their useful life.

<u>VALUE</u>	<u>DEFINITION</u>
CREOSOTE	The pole has been treated with creosote.
OTHER	Other, Not otherwise listed
PAINT	The pole has been painted to prevent corrosion.
TBD	To be determined
UNKNOWN	Unknown

DOMAIN NAME type list - pole/tower

DEFINITION Allowable input values for type of pole or tower.

<u>VALUE</u>	<u>DEFINITION</u>
DOUBLEPOLE	double pole
OTHER	other
POLE	pole
TBD	to be determined
TOWER	tower
UNKNOWN	unknown

DOMAIN NAME type list - project

DEFINITION A descriptor indicating the general category or type of project

<u>VALUE</u>	<u>DEFINITION</u>
CIVIL_WORKS	CORPS OF ENGINEERS CIVIL WORKS, GENERAL
COMPLIANCE	ENVIRONMENTAL COMPLIANCE
FUDS	DEPARTMENT OF DEFENSE FORMERLY USED DEFENSE SITE
IRP	DEPARTMENT OF DEFENSE INSTALLATION RESTORATION PROGRAM
MILCON	Military Department of Defense Construction Projects
OTHER	Other, Not otherwise listed.
RESTORATION	ENVIRONMENTAL RESTORATION, CLEANUP, OR REMEDIATION
SUPERFUND	ENVIRONMENTAL PROTECTION AGENCY SUPERFUND PROGRAM
TBD	TO BE DETERMINED
UNKNOWN	Unknown

DOMAIN NAME type list - pump

DEFINITION Allowable input values for type of pump.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
SUBMURCTFG	submersible/centrifugal
SUBMURTRBN	submersible/turbine
TBD	to be determined
UNKNOWN	unknown
VERTLFTCTFG	vertical lift/centrifugal
VERTLFTDISPL	vertical lift/displacement
VERTLFTMAG	vertical lift/magnetic
VERTLFTTRBN	vertical lift/turbine

DOMAIN NAME type list - regulator

DEFINITION Allowable input values for type of non-electrical regulator.

<u>VALUE</u>	<u>DEFINITION</u>
PRESSREDVAL	pressure reducing valve
REDUCER	reducer
REGULATOR	regulator

DOMAIN NAME type list - reservoir

DEFINITION Allowable input values for types of reservoirs

<u>VALUE</u>	<u>DEFINITION</u>
LAGOON	lagoon
LAKE	lake
OTHER	other
POND	pond
TANK	tank
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - sewage test

DEFINITION Allowable input values for type of sewage test.

<u>VALUE</u>	<u>DEFINITION</u>
BOD	biological O2 dissolved
COD	chemical O2 dissolved
DO	dissolved O2
FC	fecal coliform

OTHER	other
SS	suspended solids
TBD	to be determined
TC	total coliform bacteria
UNKNOWN	unknown

DOMAIN NAME type list - sheath insulate

DEFINITION Allowable input values for type of sheathing or insulation.

VALUE	DEFINITION
ASBEST SIL	asbestos-silicone bond
ASBESTOS	asbestos
CAMBRIC_PB_COV	varnished cambric, Pb covered
CELLULOSE	cellulose-acetate fiber
COTTON_YARN	cotton yarn
DOUBLE_TAPE	double tape armored
FIBER_PAPER	polyimide fiber paper
GLASS_FIBER	glass fiber-organic bond
GLASS_ORGANIC	glass/polyesterfib-organic bond
GLASS_SILICONE	glass/polyesterfib-silicone bond
JUTE	jute protected
NEOPRENE	neoprene
OPEN_WIRE	open wire
OTHER	other
PAPER	paper
PAPER_PB_COV	paper insulated Pb covered
PB_ARMOR	Pb armored
PB_COVER	Pb covered
PLASTIC_CLAD	plastic clad
PLASTIC_GEL	plastic, gel-filled
POLY_CROSS	polyethylene (XLPE), cross-linked
POLY_FOAM	polyethylene (PE), foamed
PPP	polypropylene (PPP)
PVC	polyvinyl chloride
QUAD_TAPE	quad tape, armored
RUBBER_BUT	rubber-butyl
RUBBER_EPT	rubber-EPT
RUBBER_NBR	rubber-NBR
SHIELDED	shielded
TAPE_ARMOR	tape armored
TBD	to be determined
TFE	polytetrafluoroethylene (TFE)

WEATHERPROOF weatherproofed
 WIRE_ARMOR single wire, armored

DOMAIN NAME type list - station

DEFINITION Allowable input values for type of station (booster, pump, electrical substation, etc.)

<u>VALUE</u>	<u>DEFINITION</u>
BOOSTER	booster station
METER	Metering Station
OTHER	other
PPSP	Propane Peak Shaving Station
PRESS REDUCE	pressure reducing station
PUMP	pumping station
SUBSTATION	electrical substation
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - stilling basin

DEFINITION Allowable input values for type of stilling basin.

<u>VALUE</u>	<u>DEFINITION</u>
BAFFLE	baffle block basin
FLIPBUCK	flip bucket
IMPACT	impact basin
OTHER	other
RIPRAP	riprap
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - structure

DEFINITION Type of a building/structure.

<u>VALUE</u>	<u>DEFINITION</u>
APARTMENT	apartment building
BARN	barn
CHURCH	church/temple
CONDO	condominium
DUPLEX	house, duplex
FACTORY	factory
HANGER	hanger
HOUSE	house, single family
OFFICE	office building
OTHER	other

SKYSCRAPER	skyscraper
SURVIVALSHLT	survival shelter
TBD	to be determined
TOWNHOUSE	townhouse
WAREHOUSE	warehouse

DOMAIN NAME type list - substation

DEFINITION Allowable input values for type of electrical substation.

<u>VALUE</u>	<u>DEFINITION</u>
DISTRIBUTION	Substations located in the middle of a load area.
OTHER	other
SUBTRANSMISSION	Electric substations with equipment used to switch circuits operating at voltages in the range of 34.5 to 161kV.
TBD	to be determined
TRANSMISSION	A substation which uses alternating current which contains equipment used to sectionalize the system when a fault or circuit develops.
UNKNOWN	unknown

DOMAIN NAME type list - substation frame

DEFINITION Allowable input values for type of substation framing.

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - treatment plant

DEFINITION Allowable input values for type of water or wastewater treatment plant.

<u>VALUE</u>	<u>DEFINITION</u>
AERATOR	aerator
AEROBIC	aerobic
ANAEROBIC	anaerobic
BIOLOGIC	biological treatment process
CHEMICALTRET	chemical treatment process
FACULTATIVE	facultative
GARBAGEINCIN	garbage incinerator plant
INDUSTRIALWS	industrial waste treatment plant
OTHER	other
SEWAGETREAT	sewage treatment plant
TBD	to be determined
UNKNOWN	unknown
WATERTREAT	water treatment plant

DOMAIN NAME type list - utility

DEFINITION Allowable input values for type of utility.

<u>VALUE</u>	<u>DEFINITION</u>
CABELTV	cable television
COMMUNICATE	communication/telephone system
ELECTRICAL	electrical
FUEL	fuel system
INDUSTRIAL	industrial waste system
NATGAS	natural gas system
OTHER	other
SANITARY	sanitary system
TBD	to be determined
UNKNOWN	unknown
WATER	water system

DOMAIN NAME type list - utility guy

DEFINITION Allowable input values for type of utility guy.

<u>VALUE</u>	<u>DEFINITION</u>
ANCHOR_GUY	anchor guy
BUILDING_GUY	building guy
COMPRESS_GUY	compressive guy
DOWN_GUY	down guy
OTHER	other
SPAN_GUY	span guy
STUB_GUY	stub guy
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME type list - water flow control

DEFINITION Allowable input values for type of water flow control.

<u>VALUE</u>	<u>DEFINITION</u>
GATE	gates
METER	meter
OTHER	other
STILLBASIN	stilling basin
TBD	to be determined
UNKNOWN	unknown
WEIR	weir

DOMAIN NAME type list - water meter

DEFINITION Allowable input values for type of water meter.

<u>VALUE</u>	<u>DEFINITION</u>
AUTOREDCNTRL	automated meter reading - centralized system
AUTOREDPTPR	automated meter reading - pit probe
AUTOREDTPAD	automated meter reading - touch pad
COMPOUND	piston/turbine - single register
DETECTOR	detector check valve - turbine - fire line, sprinklers
GENEREMOTE	generator remote system - compound and propeller meters
HYDRANT	hydrant meter at fire hydrant - turbine
IRRIGATE	irrigation meters - continuous, high flows
OTHER	other
PISTON	oscillating piston - positive displacement - normal residence
PROPELLER	propeller meters - continuous, high flows
TBD	to be determined
TURBINE	turbine - turbine driven, continuous flow - normal industrial
UNKNOWN	unknown
WEIR	open channel weir

DOMAIN NAME type list - water source

DEFINITION Allowable input values for types of water sources

<u>VALUE</u>	<u>DEFINITION</u>
ARROYO	arroyo/draw/wash
ARTISAN_WELL	artisan well
BAYOU	bayou
CREEK	creek
DEEPWELL	deep well
DRY_PLAYA	dry playa
GEYSER	geyser
GLACIER	glacier
GULF	gulf
HAIL	hail
ICEBERG	iceberg
LAKE	lake
OCEAN	ocean
OTHER	other
POND	pond
RAINFALL	rainfall
RESERVOIR	reservoir

RIME	hoarfrost, dew, condensed fog
RIVER	river
RUNOFF	runoff
SLEET	sleet
SLOUGH	slough
SNOWFALL	snowfall
SPRING	spring
STREAM	stream
SWAMP	swamp
TBD	to be determined
UNKNOWN	unknown
WET_PLAYA	wet playa

DOMAIN NAME type list - winding connection

DEFINITION Allowable input values for type of electrical winding connection.

<u>VALUE</u>	<u>DEFINITION</u>
DELTA	delta
GROUNDED_Y	grounded wye
HIGHLEG_DELTA	high-leg delta
OPEN_DELTA	open delta
OTHER	other
TBD	to be determined
UNKNOWN	unknown
Y	wye

DOMAIN NAME unit of measure - angular

DEFINITION Angular units of measure.

<u>VALUE</u>	<u>DEFINITION</u>
ARCSEC	arc seconds
DDMMSS	degrees:minutes:seconds
DEG	degrees
GRADE	grades
MICRORAD	microradians
MILLIRAD	milliradians
MINUTES	minutes
OTHER	other
PCT	percent
RAD	radians
SEC	seconds
STERAD	steradians

TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME unit of measure - area

DEFINITION Area units of measure.

<u>VALUE</u>	<u>DEFINITION</u>
ACRES	acres - 43,560 sq. feet
ARES	ares - 1 sq. dekameter
CM2	square centimeters - 0.115 sq. inches
DA	deciars - 11.96 sq. yards
DM2	square decimeters - 15.5 sq. inches
HA	hectares - 2.471044 acres
KM2	square kilometers - .3861006 sq. miles
M2	square meters - 10.76387 sq. feet - 1 centare
MI2	square miles - 640 acres
MM2	square millimeters - 0.00155 sq. inches
OTHER	other
RDS	square rods - 30.25 sq. yards
SF	square feet - 144 sq. inches
SI	square inches - 6.4516258 sq. cm.
SOCH	square chains (Surveyor) - 4356 sq. feet - 16 sq. rods
TBD	to be determined
UNKNOWN	unknown
YD2	square yard - 0.83613 sq. meters

DOMAIN NAME unit of measure - electric

DEFINITION Electrical energy units of measure.

<u>VALUE</u>	<u>DEFINITION</u>
AMP	ampere - current
ATTEN_LOSS	attenuation loss
ATTO	atto (10x-18)
BD	baud - signaling rate
BTU	British thermal unit - energy
BW	bandwidth
CD	candela - luminous intensity
CENTI	centi (10x-2)
D	deci (10x-1)
DA	deca (10x1)
DYN	dyne - force
E	exa (10x18)

ERG	erg - energy
EV	electronvolt - energy
F	femto (10x-15)
FARAD	farad - capacitance
G	giga (10x9)
GB	gilbert - magnetomotive force
H	hecto (10x2)
HENRY	henry - inductance
HP	horsepower - power
HP HR	horsepower hour - energy
HZ	hertz - frequency
JOULE	joule - energy
KA	kiloampere - current
KEV	kiloelectronvolt - energy
KHZ	kilohertz - frequency
KILO	kilo (10x3)
KJ	kilojoule - energy
KOHM	kilohm - resistance
KV	kilovolt - potential
KVA	kilovolt ampere - power (absolute)
KVAR	kilovolt ampere reactive
KW	kilowatt - power
KWH	kilowatt hour - energy
MEGA	mega (10x6)
MICRO	micro (10x-6)
MILLI	milli (10x-3)
NANO	nano (10x-9)
OE	oerstad - magnet field strength
OHM	ohm - resistance, impedance, reactance
OTHER	other
P_F_	power factor
PERCENT	percent
PETA	peta (10x15)
PICO	pico (10x-12)
O	coulomb - electric charge
RELS	reluctance - opposition to magnetic flux flow
SIEMENS	siemens - conductance, mho
TBD	to be determined
TERA	tera (10x12)
TESLA	tesla - magnetic flux density
UNKNOWN	unknown
V	volt - potential

W	watt - power
W_CM2	watts per square centimeter - power per area
WEBER	weber - magnetic flux

DOMAIN NAME unit of measure - length

DEFINITION Length units of measure.

<u>VALUE</u>	<u>DEFINITION</u>
CABLN	cable lengths - 720 feet
CH	chains - 66 feet or 100 links (Gunter)
CM	centimeters
EM	ems - 0.166667 inches
EN	ens - 0.083333 inches
FATHOM	fathoms - 6 feet
FT	feet - 0.3048006 meters
FURLONG	furlongs - 0.125 miles or 40 rods (Gunter)
HAND	hands - 4 inches, 10.160 centimeters
IN	inches - 0.126263 links (Gunter) or 2.54 centimeters
KM	kilometers - 0.53961 miles or 3280.8 feet
LEAGUE	league - 3 statute miles or 4.8280 kilometers
LINK	links - 7.92 inches or 0.04 rods (Gunter)
M	meters - 1.093614 yards or 39.3701 inches
MI	miles - 80 chains (Gunter) or 320 rods
MIL	mils - 0.001 inches
MINLAT	minutes of latitude
MM	millimeters - 0.03937 inches
MYM	myriameters - 6.21372 miles
NLEAGUE	nautical leagues - 3 nautical miles or 5.5597 kilometers
NM	nautical miles - 1.1516 statute miles
OTHER	other
PICA	picas - 0.166666 inches or 12 points
POINT	point - 0.1384 inches
RD	rods - 0.25 chains (Gunter) or 5.5 yards
TBD	to be determined
UM	micrometers - 0.00003937 inches

DOMAIN NAME unit of measure - pressure

DEFINITION Pressure units of measure.

<u>VALUE</u>	<u>DEFINITION</u>
BARYEA	barye - dynes/cm ² (absolute)
BARYEG	barye - dynes/cm ² (gauge)

INH2OA	inches of water at 4°C. (absolute)
INH2OG	inches of water at 4°C. (gauge)
INHGA	inches of mercury at 0°C. (absolute)
INHGG	inches of mercury at 0°C. (gauge)
MEGABARYEA	megabarye - 1,000,000 barye (absolute)
MEGABARYEG	megabarye - 1,000,000 barye (gauge)
MMGA	millimeters of Hg at 0°C. (absolute)
MMGG	millimeters of Hg at 0°C. (gauge)
MMHG	millimeters of Hg (torr)
OTHER	other
PSFT	pounds/ft ²
PSI	pounds/in ²
PSIA	pounds/in ² (absolute)
PSIG	pounds/in ² (gauge)
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME unit of measure - rate

DEFINITION Rate units of measure.

<u>VALUE</u>	<u>DEFINITION</u>
BOILER_HP	boiler horsepower, 33,520 BTU per hour, measure of heating ability
BTU_HR	British thermal units per hour
BTU_MIN	British thermal units per minute
BTU_SEC	British thermal units per sec
C_HR	degrees Celsius per hour
C_MIN	degrees Celcius per minute
C_SEC	degrees Celsius per second
CC_HR	cubic centimeters per hour
CC_MIN	cubic centimeters per minute
CC_SEC	cubic centimeters per second
CF_HR	cubic feet per hour
CF_MIN	cubic feet per minute
CF_SEC	cubic feet per second
CI_HR	cubic inches per hour
CI_MIN	cubic inches per minute
CI_SEC	cubic inches per second
CM_DA	centimeters per day
CM_HR	centimeters per hour
CM_YR	centimeters per year
F_HR	degrees Fahrenheit per hour
F_MIN	degrees Fahrenheit per minute

F_SEC	degrees Fahrenheit per second
FT_DAY	feet per day
FT_HR	feet per hour
FT_MIN	feet per minute
FT_MO	feet per month
FT_SEC	feet per second
FT_WK	feet per week
FT_YR	feet per year
G_CC	grams per cubic centimeter
G_HR	grams per hour
G_L	grams per liter
G_MIN	grams per minute
G_SEC	grams per second
GPD	gallons per day
GPH	gallons per hour
GPM	gallons per minute
GPS	gallons per second
IN_DAY	inches per day
IN_HG	inches of mercury
IN_HR	inches per hour
IN_MIN	inches per minute
IN_MO	inches per month
IN_SEC	inches per second
IN_WK	inches per week
IN_YR	inches per year
K_HR	degrees Kelvin per hour
K_MIN	degrees Kelvin per minute
K_SEC	degrees Kelvin per second
KG_HR	kilograms per hour
KG_MIN	kilograms per minute
KG_SEC	kilograms per second
KM_HR	kilometers per hour
KNOT	knots
L_HR	liters per hour
L_MIN	liters per minute
L_SEC	liters per second
LB_DAY	pounds per day
LB_HR	pounds per hour
LB_MIN	pounds per minute
LB_MONTH	pounds per month
LB_SEC	pounds per second
LB_WK	pounds per week

LB_YR	pounds per year
M_HR	meters per hour
M_MIN	meters per minute
M_SEC	meters per second
M3_HR	cubic meters per hour
M3_MIN	cubic meters per minute
M3_SEC	cubic meters per second
MACH	mach (speed of sound)
MGAL_DAY	million gallons per day
MPH	miles per hour
OTHER	other
PSI	pounds per square inch
TBD	to be determined
TIMES_DAY	times per day
TIMES_HR	times per hour
TIMES_MIN	times per minute
TIMES_MO	times per month
TIMES_SEC	times per second
TIMES_WK	times per week
TIMES_YR	times per year
TNSH_DAY	tons (short) per day
TNSH_HR	tons (short) per hour
TNSH_MIN	tons (short) per minute
TNSH_MO	tons (short) per month
TNSH_SEC	tons (short) per second
TNSH_WK	tons (short) per week
TNSH_YEAR	tons (short) per year
TONS	12,000 BTU per hour, measure of cooling ability
UNKNOWN	unknown

DOMAIN NAME unit of measure - temperature

DEFINITION Temperature units of measure.

<u>VALUE</u>	<u>DEFINITION</u>
A	degrees Absolute
C	degrees Celcius
F	degrees Fahrenheit
K	degrees Kelvin
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME unit of measure - volume

DEFINITION Volume units of measure.

<u>VALUE</u>	<u>DEFINITION</u>
AFT	acre feet
BDFT	board feet
CC	cubic centimeters
CD	cords
CDFT	cord-foot
CF	cubic feet
CI	cubic inches
CY	cubic yards
HL	hectoliters
HM	hectometer
KL	kiloliters
KM3	cubic kilometers
L	liters
M3	cubic meters - stere
MI3	cubic miles
ML	milliliters
MM3	cubic millimeters
OTHER	other
TBD	to be determined
TUN	tun
UAGI	gills (U.S.liquid)
UKBBL	dry barrels (U.K.dry)
UKBUDRY	bushels (U.K.dry)
UKGAL	gallons (U.K.liquid)
UKGI	gills (U.K.liquid)
UKHHD	hogsheads (U.K.liquid)
UKPK	peck (U.K.dry)
UKPT	liquid pints (U.K.liquid)
UKQT	liquid quarts (U.K.liquid)
UNKNOWN	unknown
USBBL DRY	dry barrels (U.S.dry)
USBBL LIQ	liquid barrels (U.S.liquid)
USBUDRY	bushels (U.S.dry)
USGAL	gallons (U.S.liquid)
USHHD	hogsheads (U.S.liquid)
USPK	peck (U.S.dry)
USPT DRY	dry pints (U.S.dry)

USPT_LIQ	liquid pints (U.S.liquid)
USQT_DRY	dry quarts (U.S.dry)
USQT_LIQ	liquid quarts (U.S.liquid)

DOMAIN NAME unit of measure - weight

DEFINITION Weight units of measure.

<u>VALUE</u>	<u>DEFINITION</u>
CARAT	carats
CWT	short hundredweights - cental
DWT	pennyweights
GM	grams
GS	grains
KG	kilograms
KTONS	kilotons
LB	pounds (Avoirdupois)
LBT	pounds (Troy)
MG	milligrams
OTHER	other
OZ	ounces (Avoirdupois)
OZT	ounces (Troy)
QNT	quintals
T	tonnes (metric) - millier
TBD	to be determined
TNL	tons (long)
TNSH	tons (short)
UNKNOWN	unknown

DOMAIN NAME use list - electric cable

DEFINITION Allowable input values for electric cable use.

<u>VALUE</u>	<u>DEFINITION</u>
ABANDONED	abandoned/inactive cable
OTHER	other
PRIMARY_OH	primary overhead cable
PRIMARY_UG	primary underground cable
SECONDARY_OH	secondary overhead cable
SECONDARY_UG	secondary underground cable
SERVICE_OH	service, overhead cable
SERVICE_UG	service, underground cable
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME use list - electric device

DEFINITION Allowable input values for electric device use.

<u>VALUE</u>	<u>DEFINITION</u>
ACPOWERPANEL	ac power panel
ALARMPULLBOX	alarm pullbox
BATTERY	battery
CAPACITOR	capacitor
CIRCUITBREAK	circuit breaker
COMMERCIAL	commercial service
DCPOWERPANEL	dc power panel
DISTRIBFRAME	distribution frame
DISTRIBPANEL	distribution panel
ELEC_METER	electric meter
ELEC_MOTOR	electric motor
FIELDINTERFC	field interface
GENERATOR	generator
GROUND	ground
INTDISTRFRAM	intermediate distribution frame
JUNCTIONBOX	junction box
LIGHT	light
LOAD_POINT	load point
MAINDISTRFRAM	main distribution frame
OTHER	other
PEDESTAL	pedestal
RECTIFIER	rectifier
RESIDENTIAL	residential service
SPLICE	splice
SWITCH	switch
TBD	to be determined
TRAFFICSIGNL	traffic signal
TRANSFORMER	transformer
TRFSIGCONBOX	traffic signal control box
UNKNOWN	unknown
VOLTREGULATE	voltage regulator

DOMAIN NAME use list - gas fixture

DEFINITION Allowable input values for gas fixture use.

<u>VALUE</u>	<u>DEFINITION</u>
EX_LIGHT	exterior light

IN_LIGHT	interior light
OTHER	other
SEC_LIGHT	security light
ST_LIGHT	street light
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME use list - pump

DEFINITION Allowable input values for pump use.

<u>VALUE</u>	<u>DEFINITION</u>
AIR	air
CHEMICALS	chemicals
CHILLWATER	chilled water
FREON	freon
GASOLINE	gasoline
HOTWATER	hot water
LIQUIDFUEL	liquid fuel
NATGAS	natural gas
OIL	oil
OTHER	other
SANITATION	sanitation sewage
SLUDGE	sludge
STEAM	steam
STORMWATER	storm/rainwater
TBD	to be determined
UNKNOWN	unknown
WASTEWATER	wastewater
WATER	water

DOMAIN NAME use list - reservoir

DEFINITION Allowable input values for types of reservoir useage

<u>VALUE</u>	<u>DEFINITION</u>
FISH_WILD	fish and wildlife
HYDRO	hydropower
OTHER	other
RECREAT	recreation
TBD	to be determined
TMPHOLD	temporary holding basin
UNKNOWN	unknown
WATERSUP	water supply

DOMAIN NAME use list - tank

DEFINITION Allowable input values for tank use.

<u>VALUE</u>	<u>DEFINITION</u>
CHEMICAL	chemical
DISPOSAL	disposal tank
FUEL	fuel
NATGAS	natural gas
OTHER	other
POTWATER	potable water
PROPGAS	propane gas
RAWWATER	raw water
SEPTIC TANK	septic tank
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME use list - valve

DEFINITION Allowable input values for valve use.

<u>VALUE</u>	<u>DEFINITION</u>
CHECK	check or one-way valve
CONTROL	control valve
DRAIN	drain/flush valve
MAIN	main control valve
OTHER	other
SERVICE	service control valve
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME value list - BIL kv

DEFINITION Allowable input values for Basic Insulation Level rating.

<u>VALUE</u>	<u>DEFINITION</u>
15KV	15kv basic insulation level
25KV	25kv basic insulation level
5KV	5kv basic insulation level
OTHER	other
TBD	to be determined

DOMAIN NAME value list - boolean

DEFINITION Boolean (True/False or 0/1 expressions)

<u>VALUE</u>	<u>DEFINITION</u>
NO	no
YES	yes

DOMAIN NAME value list - electric kvar

DEFINITION Allowable input values for kvar.

<u>VALUE</u>	<u>DEFINITION</u>
10	10 kvar
100	100 kvar
1000	1000 kvar
10000	10000 kvar
112.5	112.5 kvar
112_5	112.5 kvar
1250	1250 kvar
14K20K	14000 20000 kvar
15	15 kvar
150	150 kvar
1500	1500 kvar
167	167 kvar
16K22K	16000 22000 kvar
225	225 kvar
25	25 kvar
250	250 kvar
300	300 kvar
333	333 kvar
37.5	37.5 kvar
37_5	37.5 kvar
3750	3750 kvar
45	45 kvar
50	50 kvar
500	500 kvar
5000	5000 kvar
55	55 kvar
7.5	7.5 kvar
7_5	7.5 kvar
75	75 kvar
750	750 kvar

775	775 kvar
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME value list - hertz

DEFINITION Allowable input values for hertz (electrical frequency).

<u>VALUE</u>	<u>DEFINITION</u>
OTHER	other
TBD	to be determined
UNKNOWN	unknown

DOMAIN NAME value list - pipe diameter

DEFINITION Allowable input values for pipe diameter.

<u>VALUE</u>	<u>DEFINITION</u>
0.25	1/4 inch (0.25 inch)
0.5	1/2 inch (0.5 inch)
0.75	3/4 inch (0.75 inch)
0_25	1/4 inch (0.25 inch)
0_5	1/2 inch (0.5 inch)
0_75	3/4 inch (0.75 inch)
1	1inch (1.0 inch)
1.25	1 1/4 inch (1.25 inches)
1.5	1 1/2 inch (1.5 inches)
1.75	1 3/4 inch (1.75 inches)
1_25	1 1/4 inch (1.25 inches)
1_5	1 1/2 inch (1.5 inches)
1_75	1 3/4 inch (1.75 inches)
10	10 inch (10.0 inches)
12	12 Inch (12.0 inches)
2	2 inch (2.0 inches)
2.5	2 1/2 inch (2.5 inches)
2_5	2 1/2 inch (2.5 inches)
20	20 Inch (20.0 inches)
3	3 inch (3.0 inches)
4	4 inch (4.0 inches)
6	6 inch (6.0 inches)
8	8 inch (8.0 inches)
OTHER	other
TBD	to be determined

DOMAIN NAME value list - sic

DEFINITION A local list of subspecialty codes for vendors.

<u>VALUE</u>	<u>DEFINITION</u>
NA	not applicable
UNKNOWN	unknown

DOMAIN NAME value list - voltage

DEFINITION Allowable input values for voltage.

<u>VALUE</u>	<u>DEFINITION</u>
110V	110 volts
115000V	115,000 volts
115V	115 volts
120_240V	120/240 volts
12000V	12,000 volts
12000Y_6930V	12,000Y/6,930 volts
120V	120 volts
12470V	12,470 volts
12470Y_7200V	12,470Y/7,200 volts
12V	12 volts
13200V	13,200 volts
13200Y_7620V	13,200Y/7,620 volts
138000V	138,000 volts
15000V	15,000 volts
15930V	15,930 volts
19920V	19,920 volts
20780V	20,780 volts
20780Y_12000V	20,780Y/12,000 volts
208V	208 volts
208Y_120V	208Y/120 volts
220V	220 volts
22860V	22,860 volts
22860Y_13200V	22,860Y/13,200 volts
230000V	230,000 volts
230V	230 volts
2400V	2,400 volts
240V	240 volts
24940V	24,940 volts
24940Y_14400V	24,940Y/14,400 volts
24V	24 volts

27600V	27,600 volts
27600Y_15930V	27,600Y/15,930 volts
277V	277 volts
345000V	345,000 volts
34500V	34,500 volts
34500Y_19920V	34,500Y/19,920 volts
400V	400 volts
4160V	4,160 volts
4160Y_2400V	4,160Y/2400 volts
43800V	43,800 volts
460V	460 volts
4800V	4,800 volts
480V	480 volts
480Y_277V	480Y/277 volts
48V	48 volts
500000V	500,000 volts
5000V	5,000 volts
52V	52 volts
600V	600 volts
69000V	69,000 volts
7200V	7,200 volts
7620V	7,620 volts
765000V	765,000 volts
7970V	7,970 volts
8320V	8,320 volts
OTHER	other
TBD	to be determined
UNKNOWN	unknown