CITY UTILITIES
DESIGN STANDARDS MANUAL

Book 4
Water (W)
W1 Acronyms and Definitions

June 2015

W1.01 Purpose

The purpose of this Chapter is to define acronyms and terms used throughout the Water Book of the Design Standards Manual. This Chapter covers the intent and meaning of the referenced acronyms and terms.

W1.02 Acronyms

ANSI	American National Standards Institute
AG	Air Gap (Backflow Prevention)
ASTM	ASTM International (formerly American Society of Testing and Materials)
AVB	Atmospheric Vacuum Breaker (Backflow Preventer)
AWWA	American Water Works Association
CITY	The City of Fort Wayne, Indiana
CUE	City Utilities Engineering
DC	Double Check Valve (Backflow Preventer)
DPS	Department of Planning Services
DVS	Development Services
HDPE	High Density Polyethylene
IAC	Indiana Administrative Code
IBC	International Building Code
IFC	Indiana Fire Code
IDEM	Indiana Department of Environmental Management
IDNR	Indiana Department of Natural Resources
INDOT	Indiana Department of Transportation
IPC	International Plumbing Code
IURC	Indiana Utility Regulatory Commission
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Administration
PVB	Pressure Vacuum Breaker (Backflow Preventer)
PVC	Polyvinyl Chloride
ROW	Right-Of-Way
RP	Reduced Pressure Principle (Backflow Preventer)
USC	University of Southern California

W1.03 Definitions

Air-Gap	The unobstructed vertical distance, through the free atmosphere, between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of the receptacle. An air-gap is an approved method for backflow prevention.
Atmospheric Vacuum Breaker	A backflow prevention device consisting of an air inlet valve, a check seat and an air port.
Backfill	Earth and/or other material used to replace material removed from trenches or other excavations during construction activities. The backfill lies above the pipe bedding.
Backflow	Flow of water or contaminants into the public water supply distribution system from a source other than the public water supply.
Backflow Prevention Device	A device to prevent the flow of water or contaminants into the public water supply distribution system that has been approved for use by IDEM and City Utilities.
Bedding	The fractured face stone which encases the pipe to a minimum depth above and below the barrel of the pipe. The bedding serves as the pipe support.
Book	Organizational grouping of utility design standards by topic. These Books consist of General Requirements, CADD, Stormwater, Sanitary Sewer, Water and Materials.
Booster Pump	Pump installed on a pipeline to increase water pressure.
City	The City of Fort Wayne, Indiana.
City Utilities	The department of the City of Fort Wayne that manages the stormwater, wastewater and water utilities.
City Utilities Engineering	The division within City Utilities that develops City Utility Engineering Standards, manages City Utilities Projects, and performs planning and system analysis for the stormwater, wastewater and water utilities.
City Utilities Projects	Publicly funded projects that improve the stormwater, wastewater and water utilities and are under direction of City Utilities Engineering.

City Utilities Design Standards Manual A document that provides guidance and requirements for the planning, design, and construction of stormwater, wastewater, and water utility infrastructure.

Contamination An impairment of the quality of the public water supply by the presence of any foreign substance (organic, inorganic, radiological, or biological) to a degree which creates a hazard to the public health through poisoning or through the spread of disease or creates a nuisance condition such as discoloration, staining, tastes, or odors.

Cross Connection Any physical arrangement, including cross connection control devices not in working order, whereby a public water supply distribution system is directly connected, either continuously or intermittently, with any secondary source of supply, sewer, drain, conduit, pool, piping, storage reservoir, plumbing fixture, or other device which contains, or may contain, and is capable of imparting to the public water supply, contaminants, contaminated water, sewage, or other waste or liquid of unknown or unsafe quality.

Cross Connection Control Device Any device or assembly, approved by the commissioner of IDEM for construction on or installation in water supply piping, which is capable of preventing contaminants from entering the public water supply distribution system.

Cross Connection Control Device Inspector Person who has successfully completed training in testing and inspection of cross connection control devices from a training provider approved by the commissioner of IDEM, has received a registration number from the commissioner, and who has not been notified by the commissioner that the registration number has been revoked in accordance with section 11 (b) of IDEM Rule 327 IAC 8-11.

Cross Connection Hazard Any facility which, because of the nature and extent of activities on the premises or the materials used in connection with the activities or stored on the premises, would present an immediate or potential danger of health hazard to customers of the public water supply should backflow occur.

Curb Stop (Service Valve) A fitting inserted in the service pipe in the right-of-way near the property line for turning on and shutting off water to the premises supplied or to be supplied.

Customer Service Line The pipeline from the public water supply to the first tap, fixture, receptacle, or other point of customer water use; or to the first secondary source of supply, or pipeline branch in a building.

Developer	Any person, association, corporation, or entity desiring new water service for premises under their control.
Development	Any man-made change to improved or unimproved real estate, including but not limited to, buildings, or other structures, filling, grading, paving, excavation, substantial improvements, placement of mobile homes, subdivision of land.
Development Services(DVS)	The division within the department of the City Utilities that oversees non-capital projects.
Distribution System (Public)	Network of water mains and appurtenances that deliver potable water from the filtration plant to the user.
Double Check Valves	A device or assembly composed of two (2) tightly closing shut-off valves surrounding two (2) independently acting check valves, with four (4) test cocks, one (1) upstream of the four (4) valves and one (1) between each of the four (4) check and shut-off valves.
Easement	A right to occupy, access or otherwise utilize the real property of another for a specifically defined use.
Grade	The inclination or slope of a conduit or natural ground surface usually expressed in terms of the percentage the vertical rise (or fall) bears to the corresponding horizontal distance.
Permanent Easement	A permanent right-of-way to use a described parcel of land for the purposes to construct, operate, control, maintain, reconstruct, or remove a water main and appurtenances along, under, and across said easement.
Permit	Written permission from an agency with authority to control operation.
Population, Equivalent	A hypothetical number of person for which flow contributions are calculated.
Population Build-Out	The actual (equivalent) population that exists or would exist when an area is fully developed.
Pressure Vacuum Breaker	A device or assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the downstream side of the check valve for relieving a vacuum or partial vacuum in a pipeline.

Protection Device Any of the following devices: air gap separation; approved double check valve assembly; approved reduced pressure principle backflow prevention assembly; or atmospheric or pressure vacuum breaker.

Private Fire Service A privately owned arrangement of pipes, fixtures and devices designed for stand-by service and from which water is taken only for the extinguishment of fires.

Private Water Main Water main owned and operated by a private person(s), company or other non-public entity.

Public Water Main Pipe used to convey water to which all owners of abutting property have equal rights to and is controlled and maintained by the City of Fort Wayne or other public authority and regulated by the Indiana Utility Regulatory Commission.

Reduced Pressure Principle Backflow Preventer A device composed of two (2) tightly closing shut-off valves surrounding two (2) independently acting pressure reducing check valves that, in turn, surround an automatic pressure differential relief valve, and four (4) test cocks, one (1) upstream of the five (5) valves and one (1) between each of the four (4) check and shut-off valves. The check valves effectively divide the structure into three (3) chambers; pressure is reduced in each downstream chamber allowing the pressure differential relief valve to vent the center chamber to atmosphere should either or both check valves malfunction.

Right-Of-Way A general term denoting land, property or interest therein, usually a strip of land acquired for or devoted to the construction of a highway, road or street that will include the travelled way, shoulders, roadsides, auxiliary lanes, medians, border areas, park strips, sidewalks, curbs, gutters and fronting roads.

Secondary Source of Supply Any well, spring, cistern, lake, stream, or other water source, intake structure, pumps, piping, treatment units, tanks, and appurtenances used, either continuously or intermittently, to supply water other than from the public water supply to the customer. This includes tanks used to store water to be used only for fire fighting, process water, etc., even though the water contained therein is supplied from the public water supply.

Service Area A geographical area served by a public utility or water distribution system.

Standards Fort Wayne City Utilities Design Standards Manual. The requirements for the design and construction of utilities within Fort Wayne's jurisdiction.

Water Distribution System (Public) Network of water mains and appurtenances that deliver potable water from the filtration plant to the user.

Water Main Water conduits three inches (3") in diameter and larger, together with all appurtenances, any necessary valves, fire hydrants, and associated materials receiving potable water and distributing it to more than one customer.

Water Main Extension Extension of the distribution system which may serve new customers.

Water Service The portion of pipe situated between and including the tap and the curb stop, which is installed by City Utilities or a contractor and maintained by City Utilities after the expiration of any applicable maintenance bond.