

GLOSSARY

SECTION 1: ABBREVIATIONS

Wherever the following abbreviations are used in these Design and Construction Standards (Standards), or in association with these Standards, the intent and meaning shall be as follows:

AAN	American Association of Nurserymen	AWG	American Wire Gauge
AAR	Association of American Railroads	AWPA	American Wood Preservers Association
AASHTO	American Association of State Highway and Transportation Officials	AWS	American Welding Society
ABC	Aggregate Base Course	AWWA	American Water Works Association
AC	Asphaltic Cement	BFD	Boulder Fire Department
ACI	American Concrete Institute	BMP	Best Management Practices
ADT	Average Daily Trips	BRC	Boulder Revised Code, 1981
AGCA	Associated General Contractors of America	CCA	Colorado Contractors Association
AI	Asphalt Institute	CDOT	Colorado Division of Transportation
AIA	American Institute of Architects	CFR	Code of Federal Regulations
AISC	American Institute of Steel Construction	CFS	Cubic Feet Per Second
AISI	American Iron and Steel Institute	CLOMA	Conditional Letter of Map Amendment
AITC	American Institute of Timber Construction	CLOMR	Conditional Letter of Map Revision
ANSI	American National Standards Institute, Inc.	CMP	Corrugated Metal Pipe
APWA	American Public Works Association	CP	Colorado Procedure
ARA	American Railway Association	CPUC	Colorado Public Utilities Commission
AREA	American Railway Engineering Association	CRS	Colorado Revised Statutes, 1973, as amended
ARTBA	American Road and Transportation Builders Association	CRSI	Concrete Reinforcing Steel Institute
ASCE	American Society of Civil Engineers	CUHP	Colorado Urban Hydrograph Procedure
ASLA	American Society of Landscape Architects	DHV	Design Hour Volume
ASME	American Society of Mechanical Engineers	DIP	Ductile Iron Pipe
ASTM	American Society for Testing and Materials	DRCOG	Denver Regional Council of Governments
ATSSA	American Traffic Safety Services Association	DWG	Drawing
FEMA	Federal Emergency Management Agency	EDLA	Equivalent Daily Load Applications
		EIA	Electronic Industries Association
		EPA	Environmental Protection Agency

FHWA	Federal Highway Administration	NOAA	National Oceanic and Atmospheric Administration
FL	Flowline	NPK	Nitrogen-Phosphorus-Potassium
FPS	Feet Per Second	NSF	National Sanitation Foundation
FSS	Federal Specifications and Standards	OSHA	Occupational Safety and Health Administration
GIDM	Gallons Per Inch Diameter Per Mile	PC	Point of Curve
GPAD	Gallons Per Acre Per Day	PCC	Portland Cement Concrete or Point of Compound Curve
GPCD	Gallons Per Capita Per Day	PLS	Pure Live Seed
GPM	Gallons Per Minute	PMR	Physical Map Revision
HCM	Highway Capacity Manual	PRC	Point of Reverse Curve
HBP	Hot Bituminous Pavement	PRV	Pressure Reducing Valve
ICBO	International Conference of Building Officials	PT	Point of Tangent
IEEE	Institute of Electrical and Electronics Engineers	RCP	Reinforced Concrete Pipe
IES	Illuminating Engineering Society	ROW	Right of Way
IMSA	International Municipal Signal Association	SAE	Society of Automotive Engineers
IPCEA	Insulated Power Cable Engineers Association	SEO	State Engineer's Office
ISO	Insurance Service Office	SHAC	State Highway Access Code
ITE	Institute of Transportation Engineers	TC	Top of Curb
LOMA	Letter of Map Amendment	TIA	Telecommunications Institute of America
LOMR	Letter of Map Revision	TMP	Transportation Master Plan, City of Boulder
LOS	Level of Service	UBC	Uniform Building Code
MIL	Military Specifications	UDFCD	Urban Drainage and Flood Control District
MPH	Miles Per Hour	UFC	Uniform Fire Code
MUP	Master Utility Plan	UL	Underwriters Laboratories, Inc.
MUTCD	Manual on Uniform Traffic Control Devices	UMC	Uniform Mechanical Code
NCAR	National Center for Atmospheric Research	UPC	Uniform Plumbing Code
NEC	National Electrical Code	USDCM	Urban Storm Drainage Criteria Manual
NEMA	National Electrical Manufacturers Association	USGS	United States Geological Survey
NESC	National Electrical Safety Code	VPC	Vertical Point of Curve
NFPA	National Fire Protection Association	VPI	Vertical Point of Intersection
NIST	National Institute of Standards and Technology	VPT	Vertical Point of Tangent

SECTION 2: DEFINITIONS

Words and phrases contained in these Standards shall be read in context and construed according to the rules

of grammar and common usage. Words and phrases that have acquired a technical or particular meaning, whether by definition, adoption herein, or otherwise, are intended to be construed accordingly.

Wherever the phrases "**as directed**", "**as required**", "**as permitted**", or phrases of like meaning are used, it shall be understood that the direction, requirements or permission of the Director of Public Works (Director) is intended. Similarly, use of the words "**approved**", "**acceptable**", and "**satisfactory**" shall refer to approval of the Director.

The definitions in this Glossary apply throughout these Standards. The words or phrases presented have the following meaning unless the context clearly indicates otherwise:

“Alteration” means a request to use a substitute or alternative material, method, or process which will perform the same function as that provided in a particular standard.

“Approach” means the portion of an intersection leg which is used by traffic approaching the intersection.

"Approved plan" means the engineering design and construction drawings for public improvements, prepared by an engineer, which has been granted final approval by the Director of Public Works in accordance with these standards.

"As-built" means an engineering drawing of record, prepared under the direction of a licensed Colorado registered professional engineer, reflecting the actual construction of public improvements in the service area, including, but not limited to, final grading, alignments, dimensioning, elevations, locations and materials sizing and type.

“Average Daily Trips (ADT)” means the volume of traffic passing through a given point during a given time period, divided by the number of days in that time period.

"Backflow" means the reversal of the direction of flow of water or mixtures of water and other liquid, gases, or other substances into the distribution pipes of a potable water supply from any source or sources caused by backpressure and/or back-siphonage.

"Backflow prevention assembly" means any approved assembly, method, or type of construction designed to prevent backflow or back-siphonage into a public water supply by isolating the owner's water system from the public water system. In addition, see Section I. of these rules.

“Caliper” means a diameter measurement of a tree's trunk, and is measured around the trunk of the tree, six inches above tree base grade for one to four inch caliper trees and 12 inches above tree base grade for five to eight inch caliper trees. Trees measuring between four and five inch caliper shall be rounded off to the nearest inch.

“Capacity” means the maximum number of vehicles that have a reasonable expectation of passing over a given roadway or section of roadway in one direction during a given time period.

“Certified Backflow Prevention Device Tester” means any person who has passed a State of Colorado approved or sponsored certification examination, and who is listed as a certified backflow prevention device tester with the Colorado Department of Public Health and Environment.

"City" means the City of Boulder, a Colorado home rule city in Boulder County, Colorado.

"City water system" means the source and distribution facilities of the water system to the point of delivery to the owner water system. The source includes all components of the facilities utilized in the production, treatment, storage, and delivery of water to the distribution system. The distribution system includes the network of conduits used for the delivery of water from the source to the owner water system.

"Contractor" means a person, firm, partnership, subcontractor or corporation, licensed by the City that is responsible for the construction of approved public improvements associated with a specific project, or projects, within the City of Boulder service area. This term also includes the contractor's superintendent and on-site manager.

"Colorado Cross Connection Control Manual" means a manual published by the Colorado Department of Public Health and the Environment addressing cross connection control practices, Fourth Edition - Revised.

"Cross connection" means any physical arrangement whereby the city's water supply system is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains, or may contain, contaminated water, sewage, or other waste or liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as a result of backflow. Bypass arrangements, jumper connections, removable sections, swivel or changeover assemblies, and other temporary or permanent assemblies through which, or because of which, backflow could occur are considered to be cross connections.

"Delay" means the stopped time per approach vehicle, in seconds per vehicle.

"Design Hour Volume" means the hourly traffic volume used for street design and capacity analysis, usually one (1) or more peak hours during a 24 hour period.

"Design Speed" means five (5) to 10 miles per hour above the proposed or desired speed limit of the facility under design.

"Design Vehicle" means that all public and private streets must be designed to accommodate an SU-30 vehicle. The definition of this vehicle type is found in AASHTO's Geometric Highway Design Standards.

"Developer" means the person, owner, firm, or corporation responsible for the development and completion of all public improvements associated with a proposed project in accordance with these standards.

"Diameter" means the diameter size measurement of a tree's trunk, and is measured around the trunk at 4.5 feet above the tree base grade for trees greater than eight (8) inch caliper.

"Director of Public Works" means the authorized City employee, or his/her designee, responsible for the enforcement of these standards and approval of the design and construction of public improvements within the City of Boulder service area, and the overall management and direction of the Public Works Department.

"Dripline" means the outermost edge of a tree's canopy, projected on the ground.

"Engineer" means the Colorado registered professional engineer responsible for the design of all public improvements submitted to the City for a proposed project in accordance with these standards, including all

plans, calculations, specifications, and coordination of field surveys.

"Construction plan" means the engineering design and construction drawings for public improvements, prepared by an Engineer which has been submitted for final approval by the Director of Public Works in accordance with these standards.

"Hourly Volume" means the number of vehicles that pass over a given section of a lane or roadway during one hour.

"Inspector" means the Director of Public Works, or his/her designee, responsible for the inspection of public improvements construction.

"Level of Service (LOS)" refers to the definitions of LOS provided in the Highway Capacity Manual, "Definitions and Concepts."

"May" means is authorized to, or a permissive condition which indicates a choice between two (2) or more alternatives.

"Modification" means a request to change or modify a standard or the parameters of a standard because the particular application may not require the degree of rigor which the standard requires.

"Peak Hour" means the concept referring to the hour of a day when the highest volume of traffic occurs on a transportation facility.

"Planting Strip" means the landscape area within a street median, the landscape planting strip between the curb and detached sidewalk, or the landscape area between the back edge of a public sidewalk (attached or detached) and the right-of-way/property line.

"Public improvements" means any public facility, system or infrastructure in the City of Boulder service area including, but not limited to: earthwork or landscaping, streets, sidewalks, bike paths, trails, parking and traffic control devices; water supply, treatment, storage and distribution systems; wastewater collection and treatment systems; and stormwater and flood control collection and conveyance systems in public easements or right-of-way.

"Public Sign" means any sign that is posted by a governmental entity within the right-of-way for the purpose of directing traffic or parking.

"Record Set" means the engineering design and construction drawings for public improvements, sealed and signed by an engineer, approved by the Director of Public Works in accordance with these standards, and maintained on file in public records as the final approved construction document.

"Root Protection Zone" means the ground area surrounding the entire tree that extends from trunk to dripline, or a minimum of fifteen feet for column-shaped trees, whichever is greater.

"Shall" means a mandatory duty to conform to the specified standard. Where certain requirements in these standards are described with the "shall" stipulation, it is mandatory that these requirements be met or exceeded.

"**Should**" means an advisory condition. Where "should" is used, it is considered to be recommended or advisory, but not mandatory.

"**Sidewalk, Attached**" means a sidewalk and curb that are attached as one (1) continuous element.

"**Sidewalk, Detached**" means a sidewalk that is separated from the curb by a landscape planting strip.

"**Sight Distance**" means the length of roadway ahead visible to the driver. The minimum sight distance available must be long enough to enable a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path.

"**Speed Change Lane**" means a separate lane for the purpose of enabling a vehicle entering or leaving a roadway to increase (acceleration lane) or decrease (deceleration lane) its speed to a rate at which it can more safely merge or diverge with through traffic. Includes tapered areas.

"**Standards**" means the "Design and Construction Standards" manual for the City of Boulder.

"**Storage Lane**" means additional length added to a deceleration lane, to store the maximum number of vehicles likely to accumulate during a critical period without interfering with the through lanes.

"**Street Tree**" means any tree in the public right-of-way.

"**Streetscape**" means landscaping design for any streetside area, generally including but not limited to planting strips and medians.

"**Travel Demand Management**" means any action or set of actions aimed at reducing the impact of traffic by influencing people's travel behavior.

"**Trips**" means a vehicle moving from an origin point to a destination point. Trips are one-way.

"**Waiver**" means a request to delete or omit the application of a particular standard.

"**Work**" means any activity involved in the performance of constructing, installing, repairing or maintaining public improvements.