

**13-0000 PFM STRUCTURE, INTERPRETATIONS, DEFINITIONS, ABBREVIATIONS  
AND UNIT CONVERSION TABLES**

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### **13-0100 PFM STRUCTURE**

**13-0101 Sections.** The PFM is subdivided into major numbered sections. For purposes of further organization, each section may be subdivided by such numbers as .1, .2, .3, which may be further subdivided as A, B, C, (1), (2), (3), and/or (a), (b), (c) and may be cited as § 13-0102.1A(1)(a), for example.

**13-0102 Page Numbers.** Each major subject contains its own separate page numbering system. The page numbers are prefixed by the respective major subject number.

**13-0103 Plate Numbers.** Each major subject contains its own separate plate numbering system. The plate numbers are suffixed by the respective major subject number.

**13-0104 Table Numbers.** Each major subject contains its own separate table numbering system. The table numbers are prefixed by the respective major subject number.

### **13-0200 INTERPRETATIONS**

For the purpose of the PFM, certain words and terms are to be interpreted as follows:

13-0200.1 Words used in the present tense can include the future; words used in the masculine gender can include the feminine and neuter; words in the singular number can include the plural; and words in the plural can include the singular, unless the obvious construction of the wording indicates otherwise.

13-0200.2 The words “shall” and “must” are mandatory.

13-0200.3 The word “may” is discretionary, unless otherwise indicated. Such discretion shall be given by the Director.

13-0200.4 Unless otherwise specified, the term “day” shall mean calendar day.

13-0200.5 The word “State” means the commonwealth of Virginia. The word “County” means the County of Fairfax, commonwealth of Virginia; and the term “County boundary” means any exterior boundary of the County or any boundary of unincorporated territory within the County.

13-0200.6 The terms “Board of Supervisors,” “County Executive,” “Director, Department of Public Works and Environmental Services,” “Zoning Administrator,” “Health Officer,” and other similar offices shall mean the respective boards, commissions, and officers of Fairfax County and/or their duly authorized agents. The use of the term “Board” shall mean the Board of Supervisors and the use of the term “Director” shall always mean the Director of the Department of Public Works and Environmental Services or his duly authorized agent.

**13-0300 DEFINITIONS AND ABBREVIATIONS** (98-07-PFM, 53-96-PFM)

The following definitions may be used in the interpretation and administration of the PFM. The definitions of various terms as presented herein do not necessarily represent the same definitions as may be found for the same terms in chapters of the Code. Abbreviations in this section may appear in upper or lower case within the PFM. For the purpose of this publication, the following words and phrases shall have the meanings as respectively ascribed to them:

= - Equal, equal to

< - Less than

> - Greater than

' - Foot or feet

" - Inch(es)

% - Percent

# - Pound or number, as appropriate

§ - Section

**A** - Area of Drainage Basin

**AAN** - American Association of Nurserymen

**AASHTO** - The American Association of State Highway and Transportation Officials

**AC** - Acre(s)

**AC-FT** - Acre-Feet

**ADA** - Americans with Disabilities Act

**ADT** - Average Daily Traffic

**AEG** - Association of Engineering Geologists

**ALUM** - Aluminum

**ASCE** - American Society of Civil Engineers

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**ASTM** - American Society for Testing and Materials

**AWPA** - American Wood Preservers Association

**AWWA** - American Water Works Association

**BMP** - Best Management Practices

**BOARD** - Board of Supervisors, Fairfax County, Virginia

**BOCA** - Building Officials and Code Administrators

**BOR** - U.S. Bureau of Reclamation

**BRIDGE** - 1. A structure erected over a watercourse, depression or obstacle (Webster's Collegiate Dictionary). 2. As distinguished from a culvert, it is a large structure spanning a watercourse, the bed of which is left comparatively undisturbed. 3. The opening width is generally large compared to length (in the direction of flow). The structure generally consists of a deck or superstructure supported on two or more abutments or piers.

**BZA** - Board of Zoning Appeals, Fairfax County, Virginia

**C** - Runoff Coefficient (Ratio of Runoff to Rainfall)

**CAT** - Category

**CATV** - Community Antenna Television

**CBPA** - Chesapeake Bay Preservation Area

**CBR** - California Bearing Ratio

**CC** - Center to center

**CFS** - Cubic Feet per second

**CLASS 15** - Strength of concrete at 15 Megapascals

**CLASS 20** - Strength of concrete at 20 Megapascals

**CLASS 30** - Strength of concrete at 30 Megapascals

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**CLEARING** - Any intentional or negligent act to: 1. Cut down, or 2. Remove all or a substantial part of, or 3. Damage a tree or other vegetation which will cause the tree or other vegetation to decline and/or die. Such acts shall include but not be limited to damage inflicted upon the root system of the vegetation by the application of toxic substances, by the operation of equipment and vehicles, by storage of materials, or by the change of natural grade due to unapproved excavation or filling, or damage caused by the unapproved alteration of natural physical conditions.

**CMP** - Corrugated Metal Pipe

**CMU** - Concrete Masonry Unit

**CODE** - Code of the County of Fairfax, Virginia

**COE** - U.S. Army Corp of Engineers

**COG** - Metropolitan Washington Council of Governments

**CONC** - Concrete

**COUNTY** - County of Fairfax, Virginia (see § 13-0200.5)

**CROWN** - The above ground parts of a tree consisting of the branches, stems, buds, fruits and leaves. May also be referred to as “canopy” (29-90-PFM).

**CUM** – Cumulative

**CY** - Cubic Yard or Yd<sup>3</sup>

**DBH** - Diameter Breast Height

**DEQ** - Virginia Department of Environmental Quality

**DIA** - Diameter

**DIRECTOR** - Director, Department of Public Works and Environmental Services (See § 13-0200.6)

**DP** - Dry Detention Pond

**DPWES** - Department of Public Works and Environmental Services, Fairfax County, Virginia

**DPZ** - Department of Planning and Zoning, Fairfax County, Virginia

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**DSWC** - Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation

**DWG** - Drawing

**E&S** - Erosion and Sediment

**EC** - Erosion Control

**EGL** - Energy Grade Line

**ELEV** - Elevation

**ES** - Engineer Standard

**ESI** - Engineers & Surveyors Institute

**ESRC** - Engineering Standards Review Committee (see § 1-0300)

**EW** - End Wall

**FBH** - Freeboard Hydrograph

**FC** - Face of Curb

**FCPA** - Fairfax County Park Authority

**FW** - Fairfax County Water Authority

**FFHAG** - Federal Fair Housing Act Guidelines

**FHWA** - Federal Highway Administration

**FPL** - Floodplain Limits

**FPS** - Feet Per Second

**FT** - Foot or Feet

**GAL** - Gallon(s)

**GALV** - Galvanized

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**GPD** - Gallons Per Day

**GPM** - Gallons Per Minute

**GRB** - Geotechnical Review Board (see § 4-0000 *et seq.*)

**H20** - Highway Load for Trucks

**HEC** - Hydrologic Engineering Center

**HGL** - Hydraulic Grade Line

**HMR** - Hydrometeorological Report

**H:V** - A numerical ratio given for a slope. The slope is composed of a horizontal component (H) and a vertical component (V).

**HR** - Hour(s)

**HW** - Headwater

**I** - Rainfall Intensity

**ID** - Inside Diameter

**IDA** - Intensely Developed Areas

**IN** - Inch(es)

**INCRE** - Incremental

**LB** - Pound(s)

**LF** - Linear Feet

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**LIMITS OF CLEARING** - 1. The boundaries of that area of land to be cleared of trees and other vegetation in conjunction with the proposed development or land use, except that the area within these limits for such proposed development or use shall not include the removal of any monarch trees unless approved by the Director; 2. Subject to the Director's approval, the limits of clearing as shown on the plan shall generally include: A. Street construction and necessary slope construction. However, such clearing shall meet the criteria of VDOT; B. Public service or utility easements and rights-of way. This shall include area for utility line installation with any construction easements necessary for such installation and easements for maintenance access.

These easements shall not be cleared prior to actual line installation; C. Building roof coverage area and ancillary structures such as patios and porches plus 15 feet (4.6 meters) on all sides for construction activity; D. Driveways, alleyways, walkways, parking lots, and other land area necessary to the installation of the proposed development or use. Other necessary land area may include area for gardens, tennis courts, swimming pools, and lawn areas and related structures or uses; E. Area for septic field as required by the County Health Department. This shall not include area necessary for reserve lines until such time as the reserve lines must be installed; F. Sediment basins - Only the area necessary for construction of the dam, the area in which sediment will collect, and the area necessary for construction and maintenance of the basin shall be cleared of vegetation. Configuration of the basin shall utilize natural terrain as much as possible to minimize vegetation removal. Any vegetation which dies as a result of the deposition of sediment and/or debris shall be removed by the permittee; G. Detention ponds - Only the area necessary for construction of the dam and the area necessary for construction and maintenance of the pond shall be cleared of vegetation. Configuration of the pond shall utilize natural terrain as much as possible to minimize vegetation removal. Any vegetation which dies as a result of the deposition of sediment and/or debris shall be removed by the permittee.

**LL** - Liquid Limit

**LM** - Lumen(s)

**LS** - Land Surveyor licensed in the commonwealth of Virginia

**MAX** - Maximum

**MH** - Manhole(s)

**MI** - Mile(s)

**MIL** - Equal to 1/1000 inch

**MIN** - Minimum

**MPH** - Miles Per Hour

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**MSA** - Methods of Soil Analysis, Part I Physical and Mineralogical Methods, American Society of Agronomy (1986)

**MUTCD** - Manual of Uniform Traffic Control Devices

**NO** – Number

**NON-RUP** - Non-Residential Use Permit

**NPDES** – National Pollutant Discharge Elimination System

**NRCS** – Natural Resources Conservation Service

**NVPDC** - Northern Virginia Planning District Commission

**NVSWCD** - Northern Virginia Soil and Water Conservation District

**NWS** - National Weather Service

**O/O** - Outside to Outside

**OC** - On Centers

**OD** - Outside Diameter

**P** - Phosphorus

**PC** - Point of Curve

**PCCP** - Plain Concrete Culvert Pipe

**PE** - Professional Engineer licensed in the commonwealth of Virginia

**PFM** - Public Facilities Manual

**PI** - Plasticity Index

**PMP** - Probable Maximum Precipitation

**PRECIP** - Precipitation

**PROF** – Professional

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**PROJECTED 10-YEAR TREE CANOPY** - The area projected to be directly beneath the crown and within the dripline of a given tree species after a 10-year growing period (29-90-PFM).

**PSF** - Pounds per Square Foot

**PSI** - Pounds per Square Inch

**PT** - Point of Tangency

**R/W** - Right-of-way

**R** - Radius

**RC** - Reinforced Concrete

**REV** - Revised

**RIS** - Redwood Inspection Services

**RMA** - Resource Management Area

**RPA** - Resource Protection Area

**RUP** - Residential Use Permit

**S4S** - Surfaced on 4 Sides

**SDF** - Spillway Design Flood

**SDR** - Standard Dimension Ratio

**SEC** - Second(s)

**SECT** - Section(s)

**SPEC** - Specification(s)

**SPIB** - Southern Pine Inspection Bureau

**STATE** - Virginia or commonwealth of Virginia (see § 13-0200.5)

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**STD** - Standard(s)

**STGE** - Stage

**TP** - Technical Paper

**TPD** - Trips Per Day

**TR** - Technical Report

**Typ.** – Typical

**US** - United States

**USCS** - Unified Soil Classification System

**USDA** - United States Department of Agriculture

**USGS** - United States Geological Survey

**VA** - Virginia or commonwealth of Virginia

**VDH** - Virginia Department of Health

**VDOT** - Virginia Department of Transportation

**VEL** - Velocity

**VF** - Vertical Feet of Water Pressure

**VOL** - Volume

**VOSH** – Virginia Occupational and Safety Health

**VPD** - Vehicles Per Day

**VSWCD** - Virginia Soil and Water Conservation District

**USBC** - Virginia Uniform Statewide Building Code

**W** – Width

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**WP** - Wet Pond

**WRPB** - Water Resources Planning Board of the Metropolitan Washington Council of Governments

**WS** - Water Surface

**WSPOD** - Water Supply Protection Overlay District

**WWF** - Welded Wire Fabric

**YD** - Yard(s)

**YR** - Year(s)

**ZO** - Zoning Ordinance, Chapter 112 of the County Code

**NOTE:** Any term not defined here is to be given its ordinary meaning according to the context.

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**13-0400 METRIC CONVERSION TABLE**

<b>Quantity</b>	<b>From English Units</b>	<b>To Metric Units</b>	<b>Multiply by</b>
<b>Length</b>	mile	km	<u>1.609344</u>
	yard	m	<u>0.9144</u>
	foot	m	<u>0.3048</u>
	foot	mm	<u>304.8</u>
	inch	mm	<u>25.4</u>
<b>Area</b>	square mile	km <sup>2</sup>	2.59
	acre	m <sup>2</sup>	4046.856
		ha (10000 m <sup>2</sup> )	0.4046856
	square yard	m <sup>2</sup>	<u>0.83612736</u>
	square foot	m <sup>2</sup>	<u>0.09290304</u>
square inch	mm <sup>2</sup>	<u>645.16</u>	
<b>Volume</b>	acre foot	m <sup>3</sup>	1233.49
	cubic yard	m <sup>3</sup>	0.764555
	cubic foot	m <sup>3</sup>	0.0283168
	cubic foot	L (1000 cm <sup>3</sup> )	28.31685
	100 board feet	m <sup>3</sup>	0.235974
	gallon	L (1000 cm <sup>3</sup> )	3.78541
	cubic inch	mm <sup>3</sup>	<u>16387.064</u>
<b>Mass</b>	pound	kg	0.453592
	ounce	g	28.3495
	short ton (2000 lbs.)	metric ton (1000 kg)	0.907184
<b>Velocity</b>	foot/sec	m/sec	<u>0.3048</u>
	mile/hr	km/hr	<u>1.609344</u>
<b>Pressure</b>	pounds/square foot	Pa	47.8803
	pounds/square inch	kPa	6.89476
<b>Moment/Torque</b>	foot-pounds	N.m	1.355818

NOTE: Underline denotes exact number.

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**13-0500 ENGLISH CONVERSION TABLE (67-99-PFM)**

<b>Quantity</b>	<b>From Metric Units</b>	<b>To English Units</b>	<b>Divide by</b>
<b>Length</b>	km m m mm mm	mile yard foot foot inch	<u>1.609344</u> 0.9144 0.3048 <u>304.8</u> <u>25.4</u>
<b>Area</b>	km <sup>2</sup> m <sup>2</sup> ha (10000 m <sup>2</sup> ) m <sup>2</sup> m <sup>2</sup> mm <sup>2</sup>	square mile acre  square yard square foot square inch	2.59 4046.856 0.4046856 <u>0.83612736</u> <u>0.09290304</u> <u>645.16</u>
<b>Volume</b>	m <sup>3</sup> m <sup>3</sup> m <sup>3</sup> L (1000 cm <sup>3</sup> ) m <sup>3</sup> L (1000 cm <sup>3</sup> ) mm <sup>3</sup>	acre foot cubic yard cubic foot cubic foot 100 board feet gallon cubic inch	1233.49 0.764555 0.0283168 28.31685 0.235974 3.78541 <u>16387.064</u>
<b>Mass</b>	kg g metric ton (1000 kg)	pound ounce short ton (2000 lbs.)	0.453592 28.3495 0.907184
<b>Velocity</b>	m/sec km/h	foot/sec mile/hr	<u>0.3048</u> <u>1.609344</u>
<b>Pressure</b>	Pa kPa	pounds/square foot pounds/square inch	47.8803 6.89476
<b>Moment/Torque</b>	N m	foot-pounds	1.355818

NOTE: Underline denotes exact number.