

## Summary of 2015 Update to Water Engineering Standards

| 2014 Water Engineering Standards | 2015 Water Engineering Standards | Revision  |
|----------------------------------|----------------------------------|---|
| Throughout document              | Throughout document              | Change 2014 to 2015   |
| W1-02, page W1-1                 | W1-02, page W1-1                 | Replace “Central Business District (CBD)” with “Downtown (DNTN)”  |
| 2-04.3, page W2-5                | 2-04.3, page W2-5                | W2-04.3 Water General Plan Notes, below note 19, Add "(See W5-29 Abandoning Facilities for other facility abandonment)", In the second paragraph following “Ford Service Saddle FC101,” Add “CC threaded saddle and a CC thread brass plug,”  |
| W3-01.2, page W3-1               | W3-01.2, page W3-1               | Replace - "1992 Water Comprehensive Plan with "Water System Plan"; Replace - Single Family - "90" with "84"; Replace - Multi-family - "79" with "75"; Replace - Commercial - "20 Gallons per Day per 250 Square Feet of Floor Area" with "32 GPCD"; Replace - "2.85" people per single family unit with "2.80"; Replace "1.85" people per multi-family unit with "1.90"; Replace - Average Day Demand (ADD) x "2.25" with "2.00"; Replace Maximum Day Demand (MDD) x "1.80" with "3.00" |
| W3-01.2 page W3-1                | W3-01.2 page W3-1                | Replace - A. Water velocity in mains - velocities shall not exceed 10 feet per second during highest demand "and" fireflow with "including"; Replace - B. Distribution System Pressures (Measured at "Building Elevation") with "ground elevation at the customers meter"   |
| W3-01.3 page W3-2                | W3-01.3 page W3-2                | Add New Paragraph at end of section B. - "During fire suppression events, the water system must be able to provide 20-psi minimum pressure at ground level at all points throughout the distribution system. The water system must be able to provide this minimum pressure under fire-flow conditions plus the MDD rate when all equalizing and fire flow storage is   |

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|                                  |                                  | depleted (WAC 246-290-230(6))."   |
| W3-01.4 page W3-2                | W3-01.4 page W3-2                | Delete - "landscape's design/plans and a" from the last sentence.   |
| W3-03, page W3-4                 | W3-03, page W3-4                 | Replace "Central Business District (CBD)" with "Downtown (DNTN)"  |
| W3-12.6, page W3-16              | NA                               | Delete Form "WATER EFFICIENT LANDSCAPE DESIGN CERTIFICATION"  |
| W3-13.1, B page W3-20            | W3-13.1, B page W3-20            | "Delete from B." "1. Irrigation system shall be designed by a State-registered landscape architect, State licensed professional engineer, or Irrigation Association certified irrigation designer (IACID)."<br>"  |
| W3-13.1, C and D, page W3-20     | W3-13.1, C and D, page W3-19     | "Delete sections "C. Copies of the landscapes and irrigation systems designs/plans, together with a "Water Efficient Irrigation System Design Certification", must be submitted to, and approved by, the Utility prior to construction of the irrigation system.<br>D. Installed irrigation systems must successfully pass an irrigation system audit verifying a minimum average distribution uniformity of 0.625, and an "Irrigation System Design Certification", must be submitted to, and approved by, the Utility prior to construction of the irrigation system.<br>1. Audit shall be by an Irrigation Association certified landscape irrigation auditor (IACLIA)."<br><br>Replace with "C. Copies of the "Water Efficient Irrigation System Design Certification", Irrigation Water Budget Form, and Total Estimated Water Use Form must be submitted to, and approved by, the Utility prior to construction of the irrigation system.<br>D. An "Irrigation System Certification", must be submitted to, |

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|                                  |                                  | and approved by the Utility prior to Utility final acceptance of the project.""  |
| NA                               | W3-13.2, page W3-21              | Add paragraph at end of section "F. Should any of the above requirements not be met an Irrigation System Audit Certification performed by a qualified landscape professional will be required by the city prior to acceptance of the project."   |
| W3-13.2, page W3-22              | W3-13.2, page W3-21              | Replace section title - "Irrigation System Design and Performance Requirements Certifications" with "Irrigation System Design Certification"   |
| W3-13.3, page W3-22              | W3-13.2, page W3-21              | Delete from first paragraph "Water Efficient", "and "Irrigation System Audit Certification", and revise "pages" to be "page".  |
| W3-13.3 page W3-23 (Form)        | W3-13.3 page W3-22 (Form)        | Replace form title - "WATER EFFICIENT IRRIGATION SYSTEM DESIGN CERTIFICATION" with "IRRIGATION SYSTEM DESIGN CERTIFICATION"  |
| W3-13.3 page W3-23 (Form)        | W3-13.3 page W3-22 (Form)        | Replace above signature block - "The landscape irrigation system design/plans for the above stated project have been completed by the Washington State Registered Landscape Architect, Washington State Registered Professional Engineer, or Irrigation Association Certified Irrigation Designer stated above, and are in compliance with Bellevue City Code 24.02.210 "Irrigation System Design and Performance Requirements" (Water Code). All data, calculations, and information required is attached, or shown on the face of the irrigation system plans." WITH "The landscape irrigation system for the above stated project has been installed in compliance with the Bellevue City |

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|                                     |                                     | Code 24.02.210 "Irrigation System Design and Performance Requirements" (Water Code)."   |
| W3-13.3 page W3-24 (Form)           | NA                                  | Delete form - "IRRIGATION SYSTEM AUDIT CERTIFICATION"   |
| W5-18                               | W5-18                               | W5-18 Replace last paragraph, "The photographs shall be taken with a 35mm camera, developed in 4" x 6" color prints, contained in albums, catalogued, and cross-referenced." With "The photographs shall be taken with a digital camera, 2MP (4"x6") color prints, contained in albums, catalogued, and cross-referenced" |
| NA                                  | W5-29.4                             | W5-29 add new section "W2-04.3 Water General Plan Notes - Note 19"  |
| Appendix W-4                        | Appendix W-4                        | Remove Mueller Fire Hydrants from approved materials list.  |
| Appendix W-4                        | Appendix W-4                        | Add Waterous Pacer and East Jordan WaterMaster 5CD250 fire hydrants to the approved materials list.   |
| Std Detail W-16                     | Std Detail W-16                     | Replace "coupling copper to male iron pipe-ford C-28-44, Mueller H15428z" with "coupling copper to male National Pipe Thread (NPT) - ford C-28-44, Mueller H15428z"   |
| Std Detail, W-30                    | Std Detail, W-30                    | Note E. change "Ford C14-77", to "Ford C14-87"  |
| Std Detail, W-33,                   | Std Detail, W-33,                   | Std Detail W33 material list 10. Delete "for 3" meter, 500 cubic feet for 4-6" meter".  |
| Std Details, 34, 35, 42             | Std Details, 34, 35, 42             | Modify for more Generic Connections   |
| Std Detail, W-37                    | NA                                  | Delete Std Detail W-37  |
| Std Detail, W-35                    | Std Detail, W-35                    | Std Detail W35 material list 3. Delete "for 3" meter, 500 cubic feet for 4-6" meter"  |
| Std Details, W-39, W-40, W-49, W-50 | Std Details, W-39, W-40, W-49, W-50 | Change valve position to allow removal of assembly without compromising ability of the Fire Department to charge the building fire system.  |
| Std Detail, W-54                    | Std Detail, W-54                    | Delete "CBD" in note 1 Add "DNTN, AND BELL-RED"   |
| Std Detail, W-55                    | Std Detail, W-55                    | Delete "FN", and replace with, "WV"   |

