

**NOTICE OF REVISIONS TO  
CITY OF AUBURN ENGINEERING DESIGN AND CONSTRUCTION STANDARDS  
EFFECTIVE DATE 01/18/2022**

**The City of Auburn Engineering Design Standards and Engineering Construction Standards (Part 1 – Special Provisions, Part 2 – Standard Details, and the City of Auburn Surface Water Management Manual (SWMM)) have been revised as indicated below and re-issued. The effective versions are not distributed as hardcopies and are available electronically on the City’s website at:**

<https://www.auburnwa.gov/Standards and Publications>

In accordance with ACC 12.04.040 the standards have been filed with the City of Auburn City Clerk for use and examination.

**Summary of Revisions:**

**Design Standards**

- Minor revisions and corrections made throughout entire document.
- 1.01 (Definitions); Added definitions for ‘Accessible’, ‘Fixed Object’, ‘Main’, and “Nonpotable”.
- 1.03.01 (City of Auburn Surface Water Management Manual (SWMM)); Changed the Department of Ecology manual reference date from 2014 to 2019.
- 1.03.05 (Additional Technical Information); Added ‘roundabouts’ to the list of design guidance and standards.
- 1.03.06 (Other Reference Material); Added statement addressing how conflicts are resolved within referenced documents. Added the MUTCD and the Transportation Research Boards Roundabout Guide as referenced publications.
- 1.07 (Downtown Sidewalk Design Guidelines); Moved the individual sections referring to Downtown Sidewalks, Street Corners, Street Trees in Grates, Pedestrian Crosswalks, Street Lighting, and Traffic Signals to Chapter 10 and created a reference list to those Chapter sections.
- 1.07.01 (Applicability); Revised Figure 10-1 to make street references more clear.
- 1.07.02 (Downtown Sidewalks); section moved to Chapter 10.06.04
- 1.07.03 (Street Corners); section moved to Chapter 10.06.06
- 1.07.04 (Street Trees in Grates); section moved to Chapter 10.09.02
- 1.07.05 (Pedestrian Crosswalks); section moved to Chapter 10.16.05
- 1.07.06 (Lighting and Traffic Signals); section moved to Chapter 10.11.05 and 10.16.13
- 2.01.03 (Public Facility Extension (FAC) Plans and Agreement); Revised entire section.
- 2.01.04 (Other Plans); Added references to Auburn City Code in the list.
- 2.02.01 (Submittals); Modified reference to the Civil Site Improvement pdf in bulletpoint B. Made reference to MyBuildingPermit.com in bulletpoint C.
- 2.02.02 (City Review); Added requirement to provide responses to comments in a unique color on the plans.
- 2.02.03 (Plan Approval); Deleted 2<sup>nd</sup> paragraph of bulletpoint B pertaining to changes to approved plans.

- 2.02.04 (Construction Plan Revision); Added this new section pertaining to making changes after the plans have been approved.
- 2.02.05 Project Closeout); Renumbered section from 2.02.04 to 2.02.05. Changed reference of maintenance bonds to warranty bonds in the 2<sup>nd</sup> list of alphabetized bulletpoints item C.
- 3.03.01 (Standard Plan Format); Revised bulletpoint E referring to where the City of Auburn approval block is placed.
- 3.03.02 (Drafting Standards); Changed 'shall' to 'should' when referring to plan sheets sizes.
- 3.04.01 (Cover Sheet); Modified bulletpoint X pertaining to the Engineering Approval Block.
- 3.04.03 (Grading and Private Storm Drainage Plan Set); Modified bulletpoint P to include requiring storm pond profile sheets.
- 3.04.06 (Public Storm Drainage Plan Sheet); Moved this section to the Utility Plan Sheets section.
- 3.04.06 (Utility Plan Sheets); Renumbered section. Modified Water bulletpoint G to include mention of flanged joints and locking gaskets. Added 'material type' to Water bulletpoints I and J, and mentioned 'known survey control' in bulletpoint P for pertaining to stationing water mains. Updated reference to Chapter 8 title to include Storm Drainage. Added Storm Drainage section from the previous section.
- 3.04.09 (Public Street Plan and Profile Sheet); Added new Plan View bulletpoints pertaining to pavement and lane tapers, non-standard street cross slopes, and ADA Maximum Extent Feasible (MEF) documentation. Added a new Profile bulletpoint pertaining to existing and proposed flowline grades.
- Appendix A (Approval Blocks); Updated the title for approval block B-1 and the approval block to remove the word 'Engineering'.
- Appendix B – (Standard Notes); Added new storm drainage detention pond notes.
- Appendix E ( Minor Grading Permit Criteria); Under Project Thresholds, modified the combined cut and fill earthwork quantity from 50 to 200.
- 4.02.01 (Geotechnical Reports); Modified bulletpoint P to include reference Table 10-5 in Chapter 10.
- 6 (City Utility Requirements); Changed heading from 'Storm Drainage Facilities' to 'City Utility Requirements'. Entire Section was replaced to include requirements that are similar across all three public utilities, which entails easements, pipe separation requirements, and access roads.
- 6.00 (Preface); New section describing Chapter inclusions. Chapter includes standards that are applicable across all three public utilities, water, sanitary sewer, and storm drainage. The standards include information related to easements, utility pipe separation, and utility access roads.
- 6.01 (Easements); New section, including subsections pertaining to Public Utility Easements.
- 6.02 (Utility Pipe Separation); New section, including subsections pertaining to Utility Pipe Separation.
- 6.03 (Utility Access Roads); New section, including subsections pertaining to utility access roads.

- 7.01 (Water Mains and Appurtenances) – Changed heading from ‘Water Mains’ to ‘Water Mains and Appurtenances’.
- 7.01.01 (Extension Requirements); Added new section on extension requirements.
- 7.01.02 (Materials); Added new section on materials.
- 7.01.03 (Water Main Sizing); Changed section numbering. Entire section revised.
- 7.01.04 (Water Main Location); Changed section numbering. Entire section revised.
- 7.01.05 (Water Main Fittings); Changed section numbering.
- 7.06.03 (Fire Flows); Added sentences at the end of the first paragraph to address developer responsibilities for hydraulic modeling.
- 7.06.04 (Fire Authority and Hydrant Access); Revised bulletpoints A and B entirely.
- 7.07 (Public Water Utility Easements); Section content moved to Chapter 6.
- 8 (Sanitary Sewer and Storm Drainage Facilities); Changed heading from ‘Sanitary Sewer Facilities’ to ‘Sanitary Sewer and Storm Drainage Facilities’
- 8.00 (Preface); Changed entire preface to address combining Sanitary Sewer and Storm Drainage Facility requirements. Storm requirements was previously in Chapter 6.
- 8.01 (Sanitary Sewer and Storm Drainage Mains); Changed heading from ‘Sanitary Sewer Mains’ to Sanitary Sewer and Storm Drainage Mains’.
- 8.01.01 (Main Sizing/Slope); Changed heading from ‘Sanitary Sewer Main Sizing/Slope’ to ‘Main Sizing/Slope’. Modified bulletpoint A to include storm drainage main sizing, added bulletpoint D pertaining to storm drainage systems.
- 8.01.02 (Main Location); Changed heading from ‘Sanitary Sewer Main Location’ to ‘Main Location’. Modified entire section.
- 8.01.03 (Main Material); Changed heading from ‘Material Requirements for Sanitary Sewer Systems’ to ‘Main Material’. Added a Construction Column to the table of materials. Added Polypropylene Culvert and Storm Sewer Pipe to the table of materials.
- 8.02 (Sanitary Sewer and Storm Drainage Structures); Changed heading from ‘Sanitary Sewer Manholes’ to ‘Sanitary Sewer and Storm Drainage Structures’.
- 8.02.01 (Structure Type and Size) Changed heading from ‘Sanitary Sewer Manhole Type and Size’ to ‘Structure Type and Size’. Added table for materials.
- 8.02.02 (Structure Locations); Changed heading from ‘Sanitary Sewer Manhole Locations’ to ‘ Structure Locations’. Added references to catch basins where they apply.
- 8.02.03 (Manhole Parameters); Changed heading from ‘Sanitary Sewer Manhole Parameters’ to ‘Manhole Parameters’. Deleted bulletpoint C pertaining to minimum size of pipe penetrations.
- 8.03 (Sanitary Side Sewers); Changed heading from ‘ Side Sewers’ to ‘Sanitary Side Sewers’.
- 8.07 (Storm Drainage System Requirements); Changed heading from ‘Public Sanitary Sewer Utility Easements’ to ‘Storm Drainage System Requirements’. Moved utility easements information to Chapter 6. Added new section on storm system requirements, which was previously in Chapter 6. Modified SWMM Volume references to reflect change to the 2019 DOE Manual.
- 9.02 (Construction Permit Requirement); Added reference that applications are to be submitted via MyBuildingPermit.com.

- 9.03.03 (Longitudinal Trenching in Asphalt Pavement); Added statement clarifying what longitudinal trenching is. Modified bulletpoint J pertaining to requirements for trenching across streets that have recently been constructed or overlaid.
- 9.05 (Building and Structure Related Facilities); added bus shelters to the second paragraph.
- 10 (Preface); Added reference to the MUTCD. Deleted redundant information pertaining to Facility Extension Agreements already covered in Chapter 2. Deleted redundant information that is already stated in Section 1-07 pertaining to the DUC Zone requirements.
- 10.00 (Required Public Street Improvements); Modified first sentence to include traffic study process for mitigating impacts.
- 10.00.01 (Half-Street Improvements); Added statement that Pavement transition tapers shall be constructed to a minimum of 5:1 for half-street improvements.
- 10.01.05 (Private Access Roads on Access Tracts or Easements (Shared Driveways)); Moved section to Section 10.05 and renumbered remaining subsections that follow.
- 10.02.09 (Sight Distance); Added statement that easements may be required to achieve sight distance requirements.
- 10.04.04 (Curb and Right-of-Way Radius); Deleted redundant information pertaining to curb radius requirements at intersections that is already identified in Table 10-1 at the end of the Chapter.
- 10.04.01 (Intersection Control (Local Residential Streets)); Added new section.
- 10.05.02 (Driveway Locations); Added statement on single family subdivision projects. Modified section pertaining to retaining existing driveways on redevelopment (development).
- 10.05.03 (Driveway Lay Out); Added statement on driveways connecting non-single family residential to non-local roadways. Clarified sentence on driveways and onsite parking on streets other than unclassified roads (local residential).
- 10.05.04 (Driveway Alignment (Horizontal and Vertical)); Modified second paragraph to add exception for alternate driveway types.
- 10.05.07 (Private Access Roads on Access Tracts or Easements (Shared Driveways)); Modified entire section.
- 10.06.04 (Downtown Sidewalks); Deleted reference to adding a row of bricks between old and new sidewalk. Deleted Figure 10-2.
- 10.06.05 (Curb Ramps); Added reference to documenting a Maximum Extent Feasible for curb ramps on plans.
- 10.06.06 (Downtown Street Corners); Deleted reference to brick pattern extensions from back of curb to building face.
- 10.07.01 (Class I Bikeway); Added statement that bikeways shall either be asphalt or concrete at the discretion of the City and made reference to City Standard Detail T-15.
- 10.07.03 (Class III Bikeway); Deleted statement about minimum width of vehicular lanes.
- 10.08.01 (Simplified Pavement Design); Deleted reference to a minimum of 2 CBR tests per street. In Table 10-5 added Unpaved Utility Access Roads to table and modified asterisk statement t bottom of table to say total asphalt thickness.
- 10.09.02 (Street Trees); Modified entire section pertaining to Tree Planting Wells and Grates.

- 10.11.02 (Design); Modified last paragraph pertaining to light levels.
- 10.14 (Bollards); Added statement that fire access roads will be locked with a gate and knox lock.
- 10.16.01 (Median Islands); Modified bulletpoint G to include statement about maintenance of islands with street lights and vegetations.
- 10.16.04 (Signage); Added statement that “No Parking This Side” signs will be spaced at a max of 100 feet.
- 10.16.05 (Crosswalks); Added statement about requirements for permanently closed crosswalks.
- 10.16.07 (Lane Division); Added statement that lane division pavement markings are not required on local residential unless deemed necessary by the City.
- 10.16.13 (Traffic Signals); Modified entire section.
- 10.16.14 (Traffic Calming); Added new section.
- 10.17 (Traffic Impact Analysis); Deleted statement about established guidelines that are adopted by reference.
- 10.18 (Clear Zone – Lateral Separation); Modified statements to clarify how minimum lateral separation requirements are measured,
- Table 10-1 (Summary Matrix); Added ‘Min’ to the Intersection Curb Radii design criteria.
- 11 (City Telecommunication Facilities); Changed all references of ‘utility’ to ‘facilities’, including the heading.

### **Construction Standards – Part 1, Special Provisions**

- Minor revisions and corrections made throughout.
- 1-05.1(1) (Oral Orders); Moved this section to here from 1-05.17 (Oral Agreements) and renamed heading.
- 1-05.17(Oral Agreements); Section moved to 1-05.1(1).
- 1-06.1 (Approval of Materials Prior to Use); Updated costs for processing material approvals.
- 1-07.5(7) (City of Auburn Requirements); Update City of Auburn Code references.
- 1-07.15 (Temporary Water Pollution Prevention); Modified reference to Special Provisions to be Contract Specifications.
- 2-07.4(1) (Water from City Hydrants); Updated the fee schedule
- Division 5 (Surface Treatments and Pavement bases); Modified all references of PG from 64-22 to 58H-22.
- 7-04.2 (Materials); Updated pipe material list to include Polypropylene for Culverts and Storm Sewers.
- 7-09.3(25) (Pipe Casing); Added this new section on pipe casings.
- 7-15.2 (Materials); Updated materials list for Service Pipe and Tail Pieces.
- 7-17.2 (Materials); Updated table for sanitary sewer pipe.
- 8-20.3(4) Foundations; Deleted reference to foundations where no sidewalk exists.
- 9-15.11 (Cross Connection Control Devices); Updated material reference for acceptable Double Check Valve Assembly.

- 9-29.6(1)A (Lighting & Signal Standards & Davit Arms); Revised statement pertaining to material type for bolts, nuts, screws, and washers.
- 9.29.13(10) (Traffic Signal Controller Cabinet Unit); Updated the Western Systems cabinet reference.
- 9-29.19 (Pedestrian Push Buttons); Updated push button part reference.
- 9-30.3(7) (Combination Air Release/Air Vacuum); Revised entire section.
- 9-37.1 (Filter Fabric for Infiltration Systems); Revised entire section.

### **Construction Standards – Part 2, Standard Details**

The following details have been revised, added, or deleted:

1. T-01: Typical Pipe Trench Backfill
2. T-02: Existing Roadway Restoration of Utility Trenches
3. T-02A: Existing Roadway Restoration of Utility Trenches in Intersection
4. T-04: Driveway Widths and Location
5. T-06: Street Tree in Landscape Strip
6. T-07: Neighborhood Delivery & Collection Box Unit (N.D.C.B.U) Installation
7. T-11: Poured in Place Monument Type “B” Modified (DELETED)
8. T-11A: Poured in Place Monument Type “B” Modified (Asphalt) (DELETED)
9. T-17: Bicycle Lane Markings
10. T-21: Power Service Cabinet Detail
11. T-22: Traffic Signal Controller & Foundation Detail
12. T-26: Post Mounted, Street Name Sign Detail
13. T-28: Downtown Pedestrian Pole Mount Lighting Standard
14. T-29: Local Residential Ornamental Street Lighting Standard
15. T-33: Street Tree Underground Stabilization
16. T-38: Downtown Decorative Type III Combo Lighting & Mast Arm Signal
17. T-39: Downtown Decorative Light Pole
18. T-43: Downtown Pedestrian Crosswalk
19. T-45: Typical Traffic Barricades
20. T-49: Downtown Pedestrian Push Button Standard (NEW)
21. W-02: Typical Air and Vacuum Relief Valve Detail
22. W-03: 2” Permanent Blow Off Assembly
23. W-04: Temporary Blowoff Detail
24. W-13: 1” Water Service
25. W-14: 1 ½” & 2” Water Service Installation
26. W-15 Water Meter Location & Material Schedule
27. W-26: Ductile Iron Casing (NEW)

### **City of Auburn Surface Water Management Manual**

#### **Background**

Auburn’s NPDES permit requires that Auburn adopt the 2019 Ecology *Stormwater Management Manual for Western Washington (SWMMWW)* by June 30, 2022 or develop our own equivalent manual. We have chosen to adopt the 2019 Ecology Manual in Auburn’s January 1, 2022 Supplemental Manual – the NPDES permit does not require Council action for adoption.

The 2019 Ecology manual is revised extensively from the 2014 Ecology manual to combine sections, provide additional guidance, and move information throughout all 5 volumes. This required us to reformat and reorganize Auburn’s supplemental manual which was based on the 2014 Ecology manual. Steve Sturza in Development Services, M&O Storm, Ryan, and Jacob have reviewed and approved the proposed changes.

We have combined Auburn's 5 supplemental volumes into a single document with 5 sections to conform to the single-document 2019 Ecology Manual.

## **Key Changes**

### ***Vol I***

- I-3.2 - Clarified that exemption from MR#1, 3-10 for underground utility projects includes underground stormwater detention/conveyance (example: airport hanger stormwater chambers)
- I-3.4.8 - In 2022, need to revise ACC 16.10 to provide additional requirements about stormwater discharges to wetlands and reference to requirements in SWMM, include Planning and Development Services in discussion
- I-Appendix G – added airport operations zones prohibiting open ponds, provided hyperlink to Standard Maps on public website (Alex Teague is having it added and she will include the zones on the City zoning map)
- I-Appendix J – new requirements of maintenance access to all parts of public ponds, moved access road and easement requirements to COA Design Standards, Chapter 6

### ***Vol II***

- Format changes only

### ***Vol III***

- III-2.2 – modeling requirements for synthetic turf field/grass (as “grass” without underlying pipes, as “impervious” with underlying pipes)
- III-2.4 – Flow Bypass and Additional Area Inflow – no change to what is in SWMMWW and did not add any Auburn requirements – ask Ecology for the basis of the 0.4 cfs threshold, leave as is for now (Parking Lot Topic for 2022)
- III-2.5 – deleted Closed Depression Analysis (new SWMMWW has improved this section to provide sufficient guidance), retained additional guideline to refer to ACC 16.10 for critical areas
- III-3.3 – There is a section in the SWMMWW for “Changes to a Previously-Approved Stormwater Site Plan – we did not add anything in the SWMM for this section - We currently don't require changes to be clouded on the plans for development projects, we sometimes allow redlines on the plans, we sometimes allow storm report changes to be addressed with a memo. We don't have a defined process for changes to previously approved stormwater site plan – this is a parking lot item for a future year as it seems to be a desirable business practice.
- III-3.1 - moved to Vol 5, Chapter 4 (re roof downspouts restrictions in Auburn)
- III-3.2.1 but will move to Vol 5, Chapter 12 (Detention Ponds) – new requirements for additional access gate and access roads to isolated areas of detention facility, new detention pond slope preparation and seeding, new low growing and drought-tolerant seed mix at M&O request (coordinated with local seed suppliers, similar to WSDOT mix), temporary irrigation, and maintenance during seed establishment period prior to City acceptance, no trees or shrubs within City maintenance area
- III-3.2.5 but will move to Vol 5, Chapter 12 – prohibited fabric-wrapped rock for use as detention facility (“rock burrito”)
- III-Appendix D.4.1 – revised pipe materials to only those accepted by City (coordinated with Chapter 8 of Design Standards)

### ***Vol IV***

- Formatting and renumbering changes only - Ecology manual reorganized BMPs by Activity Type and Business, and added many BMPs whose BMP numbers conflict with Auburn-specific BMP numbers (Auburn renumbered its BMPs). Ecology added some previously Auburn-specific BMPs to its 2019 Manual, so the Auburn added its requirements to Ecology's BMPs. Here is a crosswalk explaining the changes [SWMM Vol IV - Renumbering BMPs.pdf](#)

**Vol V**

- V-10.3 – Only proprietary technologies approved for City owned and maintained stormwater facilities are Modular wetland without vegetation, Biopod without vegetation, and Boxless Biopods for flows  $\geq 3$  cfs. All modular wetland units shall have manholes access lids or spring assisted hatches.
- V-12 – Detention Facilities – moved from Volume 3, incorporated input from M&O and Construction (as described above)