



RECORD DRAWING REQUIREMENTS (As Built Survey)

INSTRUCTIONS

Prior to the City of Portland accepting all roads, stormwater and utility infrastructure the following information for the project must be met; **page 1, 2 and 3 must be completely filled out and returned to the City Engineer with the items listed below.** An engineer must also stamp and sign this form. Failure to return this information to this office will delay your approval; therefore, it is recommended that as soon as you anticipate a completion date for your project, you should notify your engineer immediately. **Bioretention ponds shall be surveyed during installation.**

1. An electronic Record Drawing submittal with the below layers and specifications should be emailed, or delivered to the City Engineer for review.
2. Coordinate data shall be presented in the State of Tennessee Plane system with the North American Datum 1983 (NAD83) and North American Vertical Datum (NAVD) of 1988. This data requirement subject to change based on state and federal requirements.
3. Along with the electronic Record Drawing file (DWG format), a pdf copy of the as-built must be signed and sealed by a licensed surveyor and emailed with the engineer's information for approval before any surety is released.
4. The City requires Record Drawings to be submitted for all development in the City concerning all roads, stormwater and utility infrastructure. Record Drawings should show plainly the **approved and constructed layout**, elevations, design, etc. of the entire site. The following layers must be included and checked off below for the site. **Failure to check the boxes below with accompanying signature and seal will result in a denial letter from the City of Portland.**

Certificates of Occupancy will not be granted without this document.

Stormwater:

- € Catch Basins - Top of Casting & each invert
- € Conduits (swales, ditches, etc.)
- € Hydro (ponds, streams, etc.)
- € Culverts (inlets and outfalls)
- € Headwalls
- € Water Quality Structures (Precast with all inverts. Bioretention and/or Water Quality Swales with Cross Sections. Cross section must verify depths of materials, i.e. stone, amended soils, mulch, etc....)
- € All impervious surfaces: roads, driveways, etc. Sidewalks must be verified to meet ADA requirements

Water:

- € Waterlines every 50 feet
- € Ductile Iron Fittings (Bends)
- € Valves
- € Hydrants

- € Air Release
- € Tap and Corp Stop
- € Meter Box

Sewer:

- € Manholes – Top of Casting & each invert
- € Tap Tees
- € Cleanouts
- € Force Mains every 50 feet
- € Ductile Iron Fittings (Bends)
- € Valves
- € Air Release

- € Record Drawings must include **approved and constructed layout** for paved areas and all detention and water quality infrastructures. Show cross sections at critical areas on the road systems and include storm drains in those cross sections. Certain engineered water quality conveyances such as engineered swales have a required slope and cross section to give maximum water quality benefits for the area; these require record cross sections to determine if they are built per designed specifications.

STORMWATER INFRASTRUCTURE CERTIFICATION

Project Name: _____ Submittal Date: _____

Project Address: _____

Contact Name, Phone and Email: _____

The following information is **REQUIRED** and must be submitted in the format shown:

Stormwater Pond Volume Data:

Storage Condition	<u>Wet Storage</u>	<u>Dry Storage</u>	<u>Total Storage</u>
100 yr Design Volume			
100 yr Record Volume			

Stormwater Pond Outlet Structure Data:

Design outlet device type			
Design outlet device dimensions			
Design outlet device inverts			

**New calculations for the pond are required if it is undersized or the shape has been changed.*

Storm Pipe / Structure Inventory:

Provide Design vs. Record Tables for all Storm Pipe and Structures to compare the following data:
(Pipe size, slope, material, length, invert elevations, structure casting elevations, etc...)

Do all the pipe grades exceed 0.5%? _____

Do all the pipe velocities exceed 2.0 ft. /sec? If no, which pipes? _____

Does the flow for any pipe exceed its capacity? If yes, which pipes? _____

Record Drawing Certification: I have included in the attached Record Drawing all roads, stormwater and utility infrastructure. Based on review of record survey information, and site observations, it appears that the storm water quantity, drainage structures and/or Stormwater pond and all other structures included on the Record Drawing have been constructed as shown on this/these record drawing(s). Further, it appears that the intent and design of the approved project drawings have been met or exceeded with this/these record drawing(s).	Place Engineer's Seal/Signature/Printed Name/Date in space above
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