

**COMMERCIAL, MULTI-FAMILY AND SUBDIVISION  
CERTIFICATION CHECKLIST**

Please fill in all applicable items in this Certification Form for Commercial, Multi-Family and Overall Single Family sites.

Use "OK" for items checked or actual numbers for items verified/surveyed in the field.

Use "N/A" for items that are not applicable to the site that is being certified.

Please provide an As-Built Redlined or Mylar drawing showing the following:

**A. Detention Facilities Certification**

1. Pond Certification

- Provide Topographic Records and Volume Verification Calculations
- Provide Pond Cross-Sections and Spot Elevations (especially @ Pond Embankment and Pond Flow Line)
- Positive Fall to Pan (if applicable)
- General Pond Grading including all Side-Slopes
- Invert Elevation
- Forebay Construction and Elevation
- Spillway Weir (Location, Elevation, Height, Opening Width)
- Placement and size of riprap or alternative permanent erosion control measures
- Orifice Plate and/or Water Quality Outlet Structure Installation
- Water Quality Capture Volume (Volume Required, Volume Provided and Water Surface Elevation)
- Berm and Embankment Compaction Level
- Subsurface Media for Water Quality Ponds and Swales

## 2. Swales

- Location (are they within easement?)
- Dimension and Cross-Section Verification
- Longitudinal Slopes and Side-Slopes
- Spot Elevations
- Permanent Erosion Control Measures (drop structures, riprap, lining)
- Tie-in to Storm Lines, Pans, Curbs, or other appurtenances
- Required Minimum Freeboard, Provided Freeboard
- Landscaping Infringement on Flow Line?

## 3. Pipes

- Size and Type
- Slopes (As-Built and comparison to 0.4% Minimum)
- Pipe Capacity Calculations (if slopes are significantly altered from design)
- Invert Elevations
- Installation and Backfill
- Cover
- Encasement and Clearance from other nearby utility lines
- Joints Type and construction

#### 4. Concrete Pan Channels

- Size
- Slope
- Cross Section
- Thickness
- Elevations

#### 5. Inlets

- Size and Type
- Size of Opening (or name of Standard Detail used)
- Grate Elevation
- Invert Elevation
- Box Size

#### 6. Street Cross-Pans

- Size
- Type
- Grade
- Elevations
- Cross-Sectional Depth
- Tie-in to Curb and Gutter

7. Culverts

- Size
- Type
- Invert Elevations
- Headwalls or Wing Walls

8. Sub-Drains

- Size
- Type (Perforated/Solid)
- Cover
- Backfill
- Geo-Textile Liners
- Clean-Outs

9. Curb Cuts

- Size
- Tie-in to Swale, Pipe or other appurtenances

**B. Certification of Grade Elevations Adjacent to Drainage Facilities:**

- Minimum Opening Elevations
- Top of Foundation Elevations
- Comparison to 100-year Water Service Elevations
- Comparison to Freeboard Elevations and Base Floodplain Elevations – BFE

**C. Certification of Erosion Control Measures:**

1. Permanent BMP Measures:

- Permanent Vegetation (no more than 6" bare spots and weeds under control)
- Riprap or alternative permanent erosion material
- Riprap Bedding
- Cut-Off Walls or Channel Drop Structures Cross-Sections
- Sediment Basins
- Water quality ponds/Sand Filter/Bio Retention Construction and liners
- Permanent Netting Mats or Blankets
- Mulching and Seeding

2. Temporary BMP Measures:

- Mulching and Seeding
- Temporary BMP Measures as shown on Erosion Control Plan

**D. Post-Construction Site Cleanup:**

- Construction Debris Clean-Up
- Smoothing of Ruts in all Construction Areas
- Reseeding of all Areas Affected by Construction Activities

**E. Statement of Compliance:**

This certification is signed and stamped and by signing this form the Engineer(s) attests that they have inspected the site and to the best of their knowledge the as-built conditions of the drainage facilities are as described in the above form and in the As-Built plans enclosed.

Failure to properly disclose all known information could result in the rejection of this certification and prevent the release of any and all Stormwater Utility permit holds on Building Permits and/or Certificates of Occupancy within this development.

**F. Signature and Stamp by a Colorado Registered Professional Engineer**