Erosion and Sediment Control Plan Checklist

(9/2026)

Use this checklist to prepare and check an Erosion and Sediment Control (ESC) Plan. The ESC Plan is part of the Stormwater Pollution Prevention Plan (SWPPP) and includes all of the items required by the 2022 Construction General Permit (CGP) to be on the "Site Map" (CGP 7.2.4), plus the following additional items required by the City of Albuquerque. Land-disturbing activity isn't allowed until after the City Stormwater Quality section approves the property owner's ESC Plan and NOI. This checklist does not diminish the requirements of the CGP, though some portions of the CGP have been omitted from the Checklist. However, the checklist and the City BMP details contain additional City requirements. The City of Albuquerque Standard Specifications for Public Works Construction includes the City BMP Details:

2281 Stormwater Silt Fence (SWSF)
2282 Cutback Curb (CBC)
2283 Construction Exit & Track-Out Control (CE)
2284 Compost Filter Sock (CFS)
2285 Diversion Channel (DC)
2286 Sediment Basin & Trap (SB) & (ST)

There are three types of approvals for an ESC plan: (1) ESC permit for grading, (2) ESC permit for Building Permit, and (3) Work Order construction plans. A Stormwater Quality Plan Information Sheet (the latest available form from the Construction Stormwater Quality web page) is to be submitted with each ESC plan submittal. The Property owner's Notice of Intent (NOI) documentation is also required prior to ESC Permit approval by the City Construction Stormwater Quality Section.

CGP 7.2.4 Site Map

1. Include a legible map, or series of maps, showing the following features of the site:
    a. Boundaries, lot lines, and lot numbers of the property and adjoiners, and adjoining street names;
    b. Locations where construction activities will occur, including:
        i. **Limits of land-disturbing activities** – Locations where earth-disturbing activities will occur (note any phasing), including any demolition activities and frontage improvements. (If the location changes during construction, the ESC Plan must be updated and submitted to the City);
        ii. **Existing and Proposed Grades** as shown on the Grading Plan approved by Hydrology, label longitudinal street slopes and steep slopes before and after major grading activities (note any steep slopes regulated by the IDO);
        iii. **Stockpiles –** Locations where sediment, soil, or other construction materials will be stockpiled;
        iv. **Construction Exits** –Designated points where vehicles will exit onto paved roads;
        v. **Locations of structures** and other impervious surfaces upon completion of construction; and
        vi. **Construction support activity –** Locations of on-site and off-site construction support activity areas covered by this permit (see Part

1.2.1c).

c. **Waters of the U.S.** – Locations of all waters of the U.S. within and one mile downstream of the site's discharge point. Also identify if any are listed as impaired, or are identified as a Tier 2, Tier 2.5, or Tier 3 water;

d. Critical habitat - Areas of federally listed critical habitat within the site and/or at discharge locations;

e. **Describe undisturbed and pre-construction cover** – Density and type of native undisturbed ground cover (including perennial grass and shrubs, rocks, and litter) Type and extent of pre- construction cover on the site (e.g., vegetative cover, forest, pasture, pavement, structures);

f. Drainage patterns –Both in the plan view and in a narrative description:

i. Identify locations of **concentrated flow paths that enter and exit** the disturbed areas and quantify the peak 100 year flow rate at each location.

ii. Identify locations where **sheet flow enters and exits** the disturbed area.

iii. Show existing and proposed contours on-site identifying drainage patterns of stormwater and authorized non-stormwater before and after major grading activities;

g. **Directly connected storm drains and channels –** Stormwater and authorized non-stormwater discharge locations, including locations of drainage infrastructure on and adjacent to the site through which stormwater will be discharged to waters of the U.S.;

h. **Pollutant-generating activities** – Locations of all potential pollutant-generating activities identified in CGP Part 7.2.3g;

i. **Best Management Practice (BMP) Locations, Discussion, and Details** of stormwater controls and any shared controls utilized to comply with the CGP and the City of Albuquerque Standard Specifications for Public Works Construction, Drawings 2281 – 2286 (City BMP Details for SWSF, CBC, CE, CFS, DC, SB, & ST).

i. **Specify the locations and sizes of stormwater controls** as necessary to comply with the design requirements in the CGP and the City BMP details.

ii. **Discuss the hydrology analysis**, including the drainage patterns, watershed maps, calculations, and summary tables, drawing special attention to any path with more than 50 cfs for the 100-yr flow rate; **discuss the volume design calculations** including freeboard in a summary table using the conic method for ST and SB; **discuss hydraulic design calculations** of 100-yr overflow at ST and SB and the 2-yr normal depth and freeboard at DC; **discuss the sequence of installation and removal** of the specific BMPs selected with emphasis on BMP construction before any other land-disturbing activities and BMP removal only after completion of the construction and stabilization of the rest of the site.

iii. **Details include**: relevant City BMP Details; additional details for washout, waste, posting, etc.; and project specific construction specifications and details, including ST & SB plan and profile details, cross sections of DC at retaining walls, etc.

j. **Chemicals** - Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

Additional ESC Plan Requirements

2. **TEMPORARY STORMWATER CONTROLS –** The temporary stormwater controls (BMPs) must de designed in accordance with CGP 2.2 and the City BMP Details, whichever is more restrictive.

    a. **Perimeter Controls Per CGP 2.2.3 and the City's SWSF, CFS, and DC Details.** Stormwater controls are primarily located downhill from the planned land-disturbing activities. Dust Control Silt Fence (DCSF) is required all of the way around the perimeter of the site for a separate Fugitive Dust Permit. DCSF isn't required on the ESC Plan, but if it is, differentiate between DCSF and Stormwater Silt Fence (SWSF). SWSF and properly sized Compost Filter Socks (CFS) are effective at the downstream perimeter of small areas of sheet flow only if the perimeter is level. Use a Diversion Channel (DC) along sloping perimeters instead of SWSF or CFS. Use DC instead of SWSF or CFS where the watershed size exceeds the tables in the city BMP details. Straw and/or woodchip wattles are not acceptable substitutes for SWSF or CFS. Use DC along the downstream perimeter to convey on-site stormwater to either a Sediment Trap (ST) or a Sediment Basin (SB), and you may also use it along the upstream perimeter to convey upstream off-site stormwater around the site.

    b. **Construction Exit (CE) per City BMP Details and CGP 2.2.4.** The Construction Exit (CE) must be located in accordance with the City BMP detail. Also address waste and washout on the ESC plan.

    c. **Inlet Protection (IP) per CGP 2.2.10.** Do not obstruct public inlets with inlet protection. Inlet protection on private inlets isn't an acceptable substitute for the other City BMP Details listed above.

    d. **Outlet Protection (OP) per CGP 2.2.11** - minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.

    e. **Sediment Basin & Sediment Trap (SB & ST) per City BMP Details and CGP 2.2.12** - ESC plans that include a temporary sediment basin or trap must be designed in accordance with good engineering practices by a New Mexico professional engineer qualified in erosion control. Include applicable design calculations and construction specifications on the ESC plan per CGP 2.1.2 and 9.6.1.c.iii. as follows.

        i. Watershed Map of the entire area draining to each SB or ST, regardless of whether it is disturbed or undisturbed, on-site or off-site. Each SB & ST must be designed for the area actually draining to the structure.

        ii. Calculations of the Required Retention Volume per CGP 2.2.12.c. Include the drainage area, ground cover, time of concentration, peak flow rate, and 24-hour runoff volume in a hydrology summary table for each design storm for each pond unless the required volume of "3,600 cubic feet per acre drained" is assumed. Tables 6.2.13 and 6.2.14 in Article 6-2 of the DPM are particularly useful in determining volumes and flow rates.

        iii. Where the 100-year peak flow rate is 50 cfs or more, the minimum required retention volume must be increased to the 10-year 24-hour volume to comply with ordinance § 14-5-2-12(b)(3), which requires the safe passage of stormwater runoff from the 10-year storm from May 1 to October 31

        iv. Include design volume calculations using the conic method and 100-year hydraulic calculations for each outlet on the ESC plan with the details. Include

a Table summarizing the elevation, dimensions, area, and cumulative volume of each contour and each required stage (Bottom, Sediment cleanout elevation, required volume elevation, overflow elevation. Also include the 100-yr elevation and dam top elevation if using an embankment.)

Conic volume equation: $v = \frac{h}{3}(A_1 + A_2 + \sqrt{A_1 * A_2})$

Weir equation: $Q = KLH^{3/2}$

Where k = 3.3 (sharp crest) or k = 2.7 (broad crest)

v. Include plan view and section view details of each pond with construction specifications for side slopes, spot elevations, and either dimensions or coordinates for each pond. Also, include overflow structure details with specifications for riser and spillway dimensions and materials. Include profile views through each pond labeling:

1. The pond bottom elevation, area, and volume.
2. The sediment cleanout elevation, area, and volume
3. The elevation and area of the required volume
4. The overflow elevation, area, and volume
5. The 100-year elevation, area, and volume (if using an embankment/dam)
6. The dam top elevation, area, and volume (if applicable)

vi. Where embankments or dams are allowed by the city, the design engineer must specify the zones for key or core excavation, the type of earth materials in each zone, the maximum compaction required in each zone, and surface grading tolerances per DPM Figure 6.4.7.

vii. Include details of pipe connections, riser to pipe connections, riser base, and anti-vortex trash rack.

viii. The minimum volume needed is the 2-year, 24-hour runoff volume and 10-year volume if the 100-year flow rate exceeds 50 CFS. The 100-year peak flow rate calculation is required for every pond outlet.

ix. Pond outlet structures (risers for sediment basins and spillways for sediment traps) must be designed to handle the 100-year peak flow rate.

f. **STABILIZATION MEASURES** (see Part 2.2.14). You must include construction specifications for all stabilization per CGP 9.6.1.c.

3. **DESCRIBE NATURE OF CONSTRUCTION ACTIVITIES**. Include the following:

a. A brief description of the nature of your construction activities;

b. The size of the property in acres;

c. The total area expected to be disturbed by the construction activities;

d. A description of any on-site and off-site construction support activity areas covered by this permit (see Part 1.2.1c);

e. The maximum area expected to be disturbed at any one time, including on-site and off-site construction support activity areas;

f. **Projected schedule** - A description and projected schedule for the following:

i. Post the permit coverage, make SWPPP available on-site, construct stormwater controls prior to commencement of any land-disturbing activities.

ii. Commencement of construction activities in each portion of the site, including clearing and grubbing, mass grading, demolition activities, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;

iii. Temporary or permanent cessation of construction activities in each portion of the site;

iv. Temporary or final stabilization of exposed areas for each portion of the site; and

v. Removal of temporary stormwater controls and construction equipment or vehicles, and the cessation of construction-related pollutant-generating activities.

4. **SOIL NAME, TYPE, PARTICLE SIZES, AND ERODIBILITY FACTOR (K VALUE)** – Describe the soils on the site. Including a table and map if where there is wide variation on the site. Data may be obtained on line at https://websoilsurvey.nrcs.usda.gov/app/ or from the "Soils Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico" issued June 1977 available at https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/new_mexico/NM600/0/bernalillo.pdf

5. **PROFESSIONAL SEAL** CGP 9.4.1.c.iii - Signed and dated stamp of either a New Mexico Professional Engineer (PE) or Certified Professional in Erosion and Sediment Control (CPESC) must be on all sheets. All SWPPPs must be prepared in accordance with good engineering practices by qualified (e.g. CPESC certified, engineers with appropriate training) erosion control specialists familiar with the use of soil loss prediction models and design of erosion and sediment control systems based on these models (or equivalent soil loss prediction tools). The date must be changed on all sheets each time a change is made to the plan.

6. **DRAFTING STANDARDS**: See City Standard Specifications and DPM Chapter 4 Construction Plan Standards.

   a. North Arrow - see DPM Part 4-3(L)

   b. Scales - recommended engineer scales:

   c. 1" = 20' for sites less than 5 acres

   d. 1" = 50' for sites 5 acres or more

   e. Legend - see DPM Part 4-3(K) Legend

   f. Plan drawings size: 22 x 34 inches

   g. Notes defining property line, asphalt paving, sidewalks, planting areas, ponding areas, project limits, and all other areas whose definition would increase clarity.

   h. Minimum lettering height is 3/32"

7. **Vicinity Map** – Zone Atlas Map clearly indicating the location of the Site. Street names must be legible.

8. **City Standard ESC Notes** – the latest available notes from the Construction Stormwater Quality web page. The notes will be updated from time to time, so check frequently for the latest notes.