Erosion and Sediment Control Plan Checklist

(6/16/2023)

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 Construction General Permit (CGP) to be on the "Site Map" (CGP 7.2.4). The following select additional information required in the SWPPP (CGP sections 7 and 9.4) with a few additional items required by the City Of Albuquerque must also be placed on the ESC Plan for approval by the City prior to any land disturbing activity. 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 does contain additional City requirements. 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.

1. CGP 7.2.4 Site Map

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 Entrances** –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; None

✓ 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 – Identify locations of concentrated flow paths that enter and exit the disturbed areas. Identify locations where sheet flow enters and exits the disturbed area. Show on-site 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:

i. Locations where stormwater and/or authorized non-stormwater will be discharged to storm drain inlets; and

ii. Locations where stormwater or authorized non-stormwater will be discharged directly 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** – Locations of stormwater controls, including natural buffer areas and any shared controls utilized to comply with the CGP.

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

Additional items from SWPPP to be shown on the ESC Plan

1) CGP 2.2 **EROSION AND SEDIMENT CONTROL REQUIREMENTS -** You must implement erosion and sediment controls in accordance with the following requirements to minimize the discharge of pollutants in stormwater from construction activities. CGP 9.6.1.c.i - The SWPPP must also describe design specifications, construction specifications, maintenance schedules (including a long-term maintenance plan), criteria for inspections, and expected performance and longevity of these BMPs.

a) **Perimeter Controls Per CGP 2.2.3** - To prevent stormwater from circumventing the edge of the perimeter control, install the perimeter control on the contour of the slope and extend both ends of the control up slope (e.g., at 45 degrees) forming a crescent rather than a straight line. Include maintenance notes:

i) Remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control; and

ii) After a storm event, if there is evidence of stormwater circumventing or undercutting the perimeter control, extend controls and/or repair undercut areas to fix the problem.

b) **Construction Entrance (CE) per CGP 2.2.4** - Restrict vehicle use to properly designated exit points. Use appropriate stabilization techniques at all points that exit onto paved roads. Show CE locations, construction details, and maintenance notes:

i) Implement additional track-out controls as necessary to ensure that sediment removal occurs prior to vehicle exit; and

ii) Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are

prohibited from hosing or sweeping tracked-out sediment into any constructed or natural site drainage feature, storm drain inlet, or receiving water.

c) Inlet Protection (IP) per CGP 2.2.10 – Show locations of existing and proposed inlets onsite, adjacent to site, and downstream of site on the ESC Plan. Show IP locations, construction details, and maintenance notes:

i) Clean, or remove and replace, the inlet protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found or by the end of the following business day if removal by the same business day is not feasible.

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 (SB) and Sediment Trap (ST) per CGP 2.2.12** – Are required for all drainage areas 5 acres or larger and are recommended for drainage areas larger than 3 acres.

i) Design the basin or impoundment to provide storage for either:

(1) The calculated volume of runoff from a 2-year, 24-hour storm; or

(2) 3,600 cubic feet per acre drained.

ii) Utilize outlet structures that withdraw water from the surface of the sediment basin or similar impoundment, unless infeasible.

iii) Use erosion controls and velocity dissipation devices to prevent erosion at inlets and outlets.

iv) Remove accumulated sediment to maintain at least one-half of the design capacity and conduct all other appropriate maintenance to ensure the basin or impoundment remains in effective operating condition.

f) CGP 7.2.6.b.vi **Stabilization measures** (see Part 2.2.14). You must include the following:

i) The specific vegetative and/or non-vegetative practices that will be used including CGP9.6.1.c.i construction specifications, maintenance schedules, criteria for inspections, and expected performance and longevity;

ii) The stabilization deadline that will be met in accordance with Part 2.2.14.a.i-ii;

iii) the beginning and ending dates of the seasonally dry period and the schedule you will follow for initiating and completing vegetative stabilization; and

iv) If complying with deadlines for sites affected by unforeseen circumstances that delay the initiation and/or completion of vegetative stabilization, document the circumstances and the schedule for initiating and completing stabilization

2) CGP 7.2.3 **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) 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;

ii) Temporary or permanent cessation of construction activities in each portion of the site;

iii) Temporary or final stabilization of exposed areas for each portion of the site; and

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

3) CGP 2.1.1 **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

Per Geotechnical Report

4) CGP 9.4.1.c.i **BMP Design** - The ESC Plan must identify and document the rationale for selecting the BMPs and/or other controls. If a project is to be phased, show phasing and applicable BMPs/per phase. The ESC Plan must include BMP installation details that include design specifications, construction specifications, maintenance schedules, criteria for inspections, and expected performance and longevity of these interim and permanent Stabilization and Best Management Practices.

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 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:

i) 1" = 20' for sites less than 5 acres

ii) 1" = 50' for sites 5 acres or more

c) Legend - see DPM Part 4-3(K) Legend

d) Plan drawings size: 24 x 36 inches

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

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.