

Sediment/Erosion Control Development Submittal Checklist

(This checklist may be modified from time to time to ensure compliance the City of Loveland Storm Drainage Standards).

In order to reduce delays and expedite approval of development submittals to the City of Loveland, Development Submittals to the Stormwater Utility should include some or all of the following in accordance with current Planning Department submittal checklists:

- Incorporate one or more *Permanent Stormwater Quality BMP(s)* into the development site that meets the Base Design Standard.
- A copy of *City of Loveland Base Design Standard Worksheet for Post Construction Control Measures*.
- A copy of all SOPs (Standard Operating Procedures) for all Permanent BMP(s) incorporated into the development. SOPs should include 11x17 drawing showing location of all Permanent BMP(s), Inspection and Maintenance forms, Contact Verification form and clear instruction on how to inspect and maintain all Permanent BMP(s) in order to ensure they function per design. See City of Loveland SOP(s) for examples.
- A section entitled "*Stormwater Quality*" inserted into the "*Final Drainage Report/Study*" that describes in detail what permanent Sediment and Erosion Control BMPs and Permanent Stormwater Quality BMP(s) will be incorporated into the development site.
- A section entitled "*Sediment/Erosion Control*" inserted into the "*Final Drainage Report/Study*" that briefly describes what types of temporary Sediment and Erosion Control BMPs will be installed.
- Insert the name of the Qualified Stormwater Manager along with contact information on the cover sheet of the plan set of drawings.
- Insert the *General Notes* that are found in the *Larimer County Urban Area Street Standards (LUCAS)*. *Note: references to Local Entity, County & State should be replaced with City of Loveland, County of Larimer & State of Colorado.*
- Insert the *Standard Erosion & Sediment Control Construction Notes* that are found on *City of Loveland website*.
- Ensure that Erosion and Sediment Control Drawings are formatted as shown per State recommendations:
 - Phase 1 - Grading Phase - BMPs for perimeter controls before clearing and grading begins.
 - Phase 2 - Infrastructure Phase - BMPs for utility; paving; curb & gutter installation during all phases of construction (temporary construction BMPs).
 - Phase 3 - Vertical Construction Phase - BMPs for individual lot construction.
 - Phase 4 - Post-construction & Final stabilization (permanent & permanent stormwater quality BMPs).
 - Note it will be required that all small projects generate at a minimum two Erosion and Sediment Control drawings. One with Phases 1 and 2 and the second with Phases 3 and 4. Larger development submittals should have drawings for each phase as shown above.

- Insert appropriate *Details* into the plan set of drawings for all proposed *Temporary Sediment/Erosion Control and Permanent Stormwater Quality BMPs* proposed for the development site such as:

Temporary

Sediment/Erosion Control BMPs

- Concrete Washout Area (CWA)
- Curb Inlet Block & Gravel Filter (CIP-1)
- Curb Inlet Gravel Filter (CIP-2)
- Drop Inlet Block & Gravel Filter (DIP-1)
- Drop Inlet Silt Fence Box (DIP-1)
- Drop Inlet Wattle Filter (DIP-3)
- Rock Dike (RD)
- Sediment Basin (SB)
- Sediment Trap (ST)
- Silt Dike (SD)
- Silt Fence (SF)
- Vehicle Tracking Control Pad (VTC)
- Wattle Dike (WD)
- Wattle – Stakes through (W1)
- Wattle – Stakes adjacent to (W2)
- Wattle – Gutter Protection Set-up (W3)
- Wattle Filter (W4)
- Other _____

Permanent

Stormwater Quality BMPs

- Constructed Wetland Basin (CWB)
- Constructed Wetland Channel (CWC)
- Extended Detention Basin (EDB)
- Grass Buffers (GB)
- Grass Swale (GS)
- Modular Block Porous Pavement (MBP)
- Porous Landscape Detention (PLD)
- Porous Pavement Detention (PPD)
- Rain Garden (RG)
- Retention Pond (RP)
- Sand Filter Extended Detention Basin (SFB)
- SNOUT (SN)
- Storm Drain Inlet Filters (IF)
- Sunken Medians with Curb Cut & Under Drain (SM)
- Tree Filter (TF)
- Vegetated Roofs (VR)
- Water Quality Vault (WQV)
- Green Roof (GF)
- Other _____

- Insert a *Legend* that contains each of the *Temporary Sediment/Erosion Control and Permanent Stormwater Quality BMP(s)* proposed for the development site. *Note: The Legend should include the symbol, code and appropriate description for each BMP as shown in the City's most recent Storm Drainage Standards.*

- Utilize a temporary *Slope Protection (SP)* BMP along the steep slopes by using a tracked vehicle run perpendicular to slopes to inhibit rill/gulley erosion. *Note: the following symbol and note should be placed in the Legend(s):*

(SP) ~ Slope Protection – Contractor to terrace slopes using a “tracked” vehicle, run perpendicular to slope to inhibit rill/gulley erosion, contractor may use other windrow-type methods as approved by engineer.