

Sediment/Erosion Control Development Submittal Checklist:

(Note: This checklist may be modified from time to time by the Director of Public Works as necessary 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 in order to reduce runoff from the site & improve the water quality of stormwater runoff. *Note: See list on page 4.*
- A copy of the City of Loveland Stormwater Quality Permit Application or a copy of the City of Loveland Stormwater Quality Permit Application-Small Site.
- A copy of the Acknowledgement Certificate **of Receipt of City of Loveland** Stormwater Quality Enforcement Policy.
- A copy of the **City of Loveland Erosion Control Best Management Practices (BMP)** Cost Opinion Spreadsheet.
- A signed copy of either the Agreement for Sediment/Erosion Control Best Management Practices (BMPs) with Irrevocable Letter of Credit or the Agreement for Sediment/Erosion Control Best Management Practices (BMPs) with Cash Deposit.
- Verification that a **Stormwater Discharge Permit (SDP)** has been granted from the Colorado Department of Public Health and Environment (CDPHE), Water Quality Control Division when the development site is greater than or equal to one (1) acre. *Note: a copy of the signed application form submitted to the state CDPHE to acquire a Stormwater Discharge Permit is insufficient.*
- Verification that a **Fugitive Dust Control Permit** has been granted from the Colorado Department of Public Health and Environment (CDPHE) when the development site is greater than or equal to twenty-five (25) acres or takes more than six (6) months to complete. *Note: a copy of the signed application form submitted to the state CDPHE to acquire a Fugitive Dust Control Permit is insufficient.*
- When **applicable**, verification that a **Fugitive Dust Control Permit** has been granted from the Colorado Department of Public Health and Environment (CDPHE) when the development site is less than twenty-five (25) acres, and less than six (6) months in

duration but more than one (1) acre in nonattainment areas or more than five (5) acres in attainment areas. *Note: a copy of the signed application form submitted to the state CDPHE to acquire a Fugitive Dust Control Permit is insufficient.*

- When **applicable**, verification that a **State Construction Dewatering Wastewater Discharge Permit** was obtained from the state. *Note: a copy of the signed application form submitted to the state CDPHE to acquire a State Construction Dewatering Wastewater Discharge Permit is insufficient.*
- If **applicable**, a copy of the **401/404 Permit** obtained from the Corps of Engineers. *Note: a copy of the signed application form submitted to the Corps of Engineers to acquire a 401/404 Permit is insufficient.*
- When **applicable**, a copy of the **Stormwater Management Plan (SWMP)** that has been prepared to satisfy the requirements of the states SDP. *Note: See SWMP Fact Sheet.*
- When **applicable**, a copy of the **Water Quality Control Plan** that has been prepared in accordance with the canal or ditch company's direction to ensure that:
 - a). Sediment from all construction activities, including the work within and adjacent to the canal or ditch is not transported downstream.
 - b). Sediment from the construction site is not discharged into the canal or ditch.
 - c). The area(s) of disturbance within and along the canal or ditch are properly stabilized. *Note: If the work is performed while the canal or ditch is full, the water will need to be shut off or diverted around work site until the site (canal or ditch bottom and side slopes) are properly stabilized.*
- When **applicable**, a copy of the **Water Quality Control Plan** that has been prepared in accordance with the City of Loveland's direction to ensure that:
 - a). Sediment from all construction activities, including the work within and adjacent to a waterway is not transported downstream.
 - b). Sediment from the construction site is not discharged into a waterway.
 - c). The area(s) of disturbance within and adjacent to a waterway is/are properly stabilized. *Note: water will need to be diverted around the site until the site (waterway bottom and side slopes) are properly stabilized.*
- A section entitled "**Stormwater Quality**" inserted into the "*Final Drainage Report/Study*" that describes in detail what *Permanent Stormwater Quality BMP(s)* will be incorporated into the development site so that once the site has been developed the water quality of the stormwater runoff will be improved before it is released from the development site. *Note: A descriptive narrative should be included for each Permanent Stormwater Quality BMP incorporated into the development site.*

- A section entitled “**Sediment/Erosion Control**” inserted into the “*Final Drainage Report/Study*” that briefly describes what Erosion Control¹ measures will be employed and what types of temporary Sediment Control² BMPs will be installed and maintained to prevent sediment and construction materials from leaving the site before and during all phases of construction until the site is sufficiently stabilized. *Note: When applicable, a reference to the SWMP; Fugitive Dust Control, State Construction Dewatering Wastewater Discharge, and 401/404 Permits; and Water Quality Control Plan(s) should be included in the written narrative.*

In addition to the above information the following information should be incorporated within the plan sheet drawings:

- Insert the name of the **SWMP Administrator** along with contact information on the cover sheet of the plan set of drawings so the City of Loveland knows whom to contact if additional sediment/erosion control is required and/or maintenance of the proposed sediment/erosion control BMPs are not being properly maintained. *Note: If you haven’t identified, are not sure or don’t know who this person is yet, please designate someone, i.e., owner, developer, contractor etc. and include the name of the designee along with any contact information. Also Note: The words “SWMP Administrator” should be added next to whoever is the designee, i.e., Owner/SWMP Administrator.*
- Insert the General Notes that are found in **LCUASS** the **Larimer County Urban Area Street Standards**. *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 in **LCUASS**.
- Insert the City of Loveland Stormwater Quality Enforcement Policy into the plan set of drawings.
- Show what **Temporary Sediment and Erosion Control BMPs** will be installed and maintained before and during all phases of construction. *Note: The symbols and codes for each BMP need to be consistent with those depicted within the City’s most recent Storm Drainage Standards.*

¹ EROSION CONTROL is any practice that protects the soil surface and prevents the soil particles from being detached by the actions of wind or water. Erosion control, therefore, is a source control that treats the soil as a resource that has value and should be kept in place. Envirotech Publications, Inc., The Water Report, Issue #13, March 15, 2005, page 10, www.thewaterreport.com.

² SEDIMENT CONTROL is any practice that traps soil particles after they have been detached and moved by of wind or water. Sediment control measures are usually passive systems that rely on filtering or settling particles out of the wind or water that is transporting them. Envirotech Publications, Inc., The Water Report, Issue #13, March 15, 2005, page 10, www.thewaterreport.com.

- Show the **location of** and **label** each of the **Permanent Stormwater Quality BMPs** that will be incorporated into the development site on a separate plan sheet.
- 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-2)
- 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 Buffer (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)
- SNOOUT (SN)
- Storm Drain Inlet Filter (IF)
- Sunken Medians with Curb Cut & Under Drain (SM)
- Vegetated Roofs (VR)
- Water Quality Vault (WQV)
- Tree Filter (TF)
- 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. Typical all slopes, repeat as necessary until landscaping is installed.

This Sediment/Erosion Control Development Submittal Checklist is available on the City’s Stormwater Quality website which can be reached by clicking on the Stormwater Development Guidelines menu option.