

Grading/ESC Permit

A Grading Permit is required for projects that **disturb $\geq 5,000$ sq. ft.** This permit requires approval of a Stormwater Pollution Prevention Plan and Grading Plan. Information is to be submitted **electronically through OpenGov/Citizens services.**

Rate Control

Required if **disturbance is ≥ 1.0 Acre** or **part of a common plan of development** that ultimately disturbs ≥ 1.0 Acre.

⇒ Match or reduce pre-existing discharge rates for the 2-year, 10-year, and 100-year 24 hour storm events

*****Rate control may be required on any project at the discretion of the City Engineer in areas with limited storm system capacity, known drainage issues, or if modification to drainage area/sub-watershed characteristics are proposed.**

Water Quality Volume (WQV) Treatment

Required if **disturbance is ≥ 1.0 Acre** or **part of a common plan of development** that ultimately disturbs ≥ 1.0 Acre **AND** project where the **sum of new and/or fully reconstructed impervious surfaces is ≥ 1.0 Acre.**

*****Impervious surfaces are considered cumulative over the life of the property**

Non-linear Projects

WQV = (1") x (new + fully reconstructed impervious areas)

See reverse side for fully reconstructed definition.

Linear Projects

WQV = (1") x (new impervious areas) **OR**
WQV = (0.5") x (new + fully reconstructed impervious areas)

Whichever is larger.

[Stormwater Management Code 52.00](#)

[City Construction Stormwater Information](#)

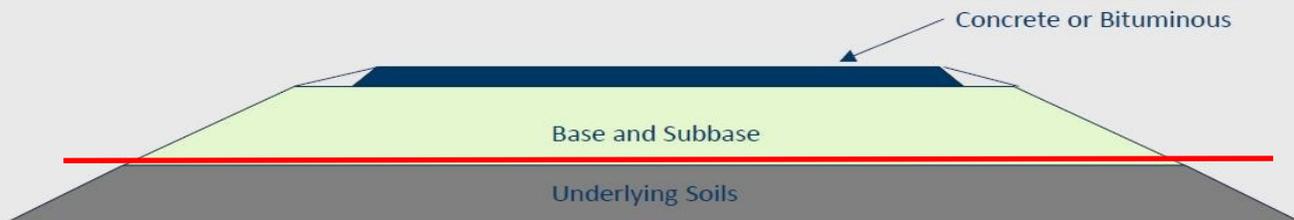
[MPCA Construction Stormwater Information](#)

[MN Stormwater Manual](#)

Fully Reconstructed Definition

Areas where impervious surfaces have been removed down to the underlying soils. Activities such as structure renovation, mill and overlay projects, and other pavement rehabilitation projects that do **not** expose the underlying soils beneath the structure, pavement, or activity are **not** considered fully reconstructed. Projects **solely** performing maintenance activities such as catch basin repair/replacement, utility repair/replacement, pipe repair/replacement, lighting, and pedestrian ramp improvements are **not** considered fully reconstructed.

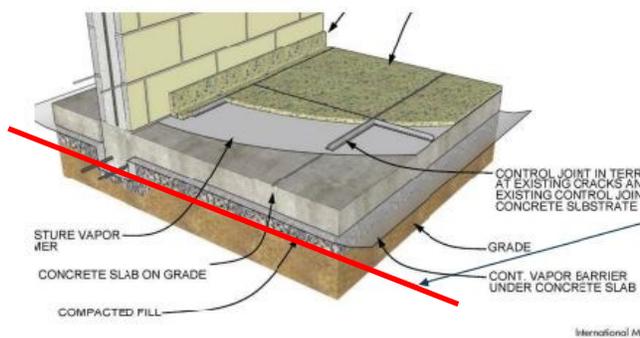
Linear Projects and Parking Lots



Base and Subbase - A manufactured material, usually a granular material. These layers may also be crushed rock, recycled material or TDA (tire shreds).

Underlying soils - In-situ soils or fill soils (natural, not a man made gradation).

Non-Linear Projects



Removal down to the elevation of the “grade” in this diagram would represent the “exposure of underlying soils”

A typical slab on grade construction consists of a layer of concrete over some type of engineered compacted fill material. These types of building would not be considered fully reconstructed unless the concrete and compacted fill are removed. In some case there may not be a compacted fill layer.