

Stormwater Friendly Driveways: Solid Pavers and Turf Pavers

Pavers are interlocking blocks of stone, brick, or concrete that can be installed instead of conventional impervious paving. There are two main types of paver systems: impervious block systems that incorporate spaces between to allow infiltration, or systems with larger spaces within blocks filled with clean washed stone, or grass or other suitable vegetation.

Installation of pavers begins with a level base of existing or “native” soil (see schematic drawing on the next page). A washed gravel subbase (e.g., No. 57 stone) may be spread over the soil base to provide a reservoir for holding runoff prior to infiltration. Incorporating a gravel subbase increases the stormwater management benefits of using pavers, and is especially important on less well-drained or clay soils. A bedding course is then placed, leveled, and compacted. The bedding course accommodates minor differences in the pavers and allows the pavers to seat firmly so that they won’t rock and crack. The pavers are laid on the bedding course, and are filled with bedding course or sand/soil material according to the paver manufacturer’s specifications. Open space pavers can be either filled with stone or seeded.

CURB APPEAL: Many colors, styles, and patterns are available and pavers have great aesthetic value. Pavers have much the same look as brick driveways, but offer greater water quality benefits. To minimize installation costs, consider using solid pavers and turf pavers together in a ribbon driveway layout (see companion sheet) if suitable for your site.

EROSION PREVENTION: Replacing gravel surfaces with pavers can reduce erosion and contaminant transport to storm drains, and can help reduce localized flooding and pooling during storm events.

WATER QUALITY: Paver systems filter water as it passes through, and help recharge local groundwater.

QUICKER SNOWMELT AND DRAINAGE: Increased drainage and air flow mean snow melts more quickly and drains away, instead of re-freezing and creating slippery conditions. Less deicer is needed, lowering winter maintenance costs while keeping chlorides from leaching into ground and surface waters.

DURABILITY: Pavers are better able to move with the freeze-thaw cycle, rather than cracking like typical pavement. Individual pavers can easily be replaced as needed.

CONSIDERATIONS: Some site preparation, such as clearing and leveling, is necessary to ensure that the pavers are installed evenly and correctly and won’t “pop”. Care should be taken when applying deicers to vegetated pavers in the winter.

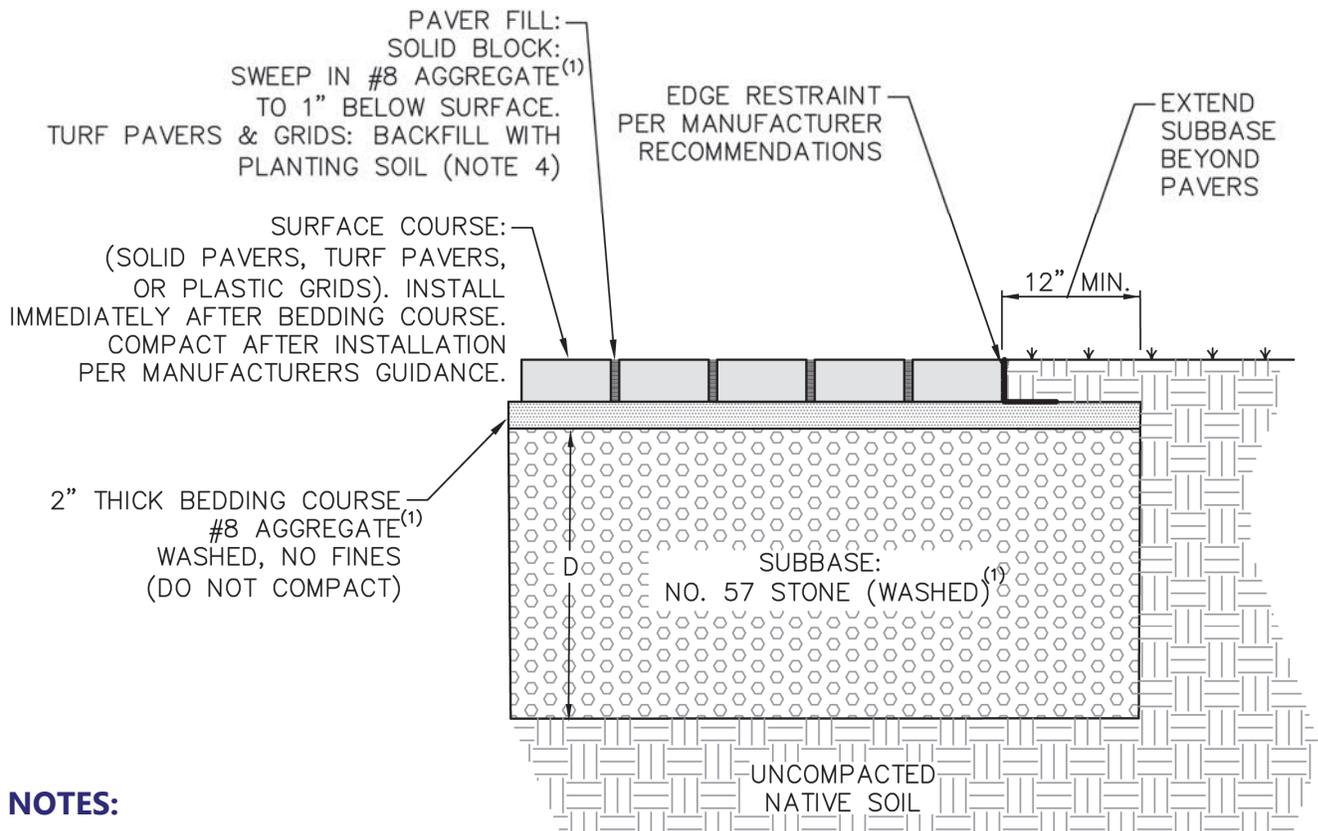


A concrete paver walkway in Burlington.



Concrete paver driveway planted with turf.

Solid Pavers and Turf Pavers: Schematic Drawing (not to scale)



NOTES:

- (1) Refer to the companion Local Vendors List for locally available products.
- (2) Compact subbase material in minimum 6" lifts.
- (3) All aggregates must be washed angular crushed stone. Do not use rounded stone.
- (4) Planting soil mix for turf pavers to be 60:40 concrete sand/soil, or 70:30 concrete sand/compost (blend prior to placement).
- (5) Do not use stone dust or stone screenings within the paving system.
- (6) Subbase thickness dimension "D" is 10" for sandy, well drained soils, and 16" otherwise. This subbase thickness is for residential driveways only. Locations that experience heavy vehicle loads or have clay soils will require subbase design by qualified professional. Maximum driveway slope should not exceed 5%.

ESTIMATED INSTALLATION COSTS:

Solid and turf paver costs start at \$20 per square foot. This cost includes subbase installation, but not demolition of the existing driveway. Costs vary based on soil conditions, driveway size, and contractor availability.

The typical cross sections provided herein are conceptual only and are not intended for use as construction documents. Refer to manufacturer for installation and maintenance requirements for all products. Modifications to the typical sections may be necessary based upon soil conditions and site suitability. Contact a qualified professional to verify suitability for each application.

