

Roadside Swales

The facts about roadside infiltration swales

Roadside swales are designed to collect runoff from roads, sidewalks and residential lots to prevent flooding by allowing the water to seep underground.

The developer of the subdivision requested swales as an option to traditional drainage structures, which generally convey water to large pond site(s).

The Ada County Highway District is confident that the developer's efforts to remedy the swale performance issues will work, but the homeowners themselves and the homeowners association share a responsibility in the proper performance and upkeep of these structures.



Why were swales used in my subdivision?

- The developer requested the swales because of the area's high groundwater, which can hinder drainage and made a traditional drainage system impractical.
- ACHD required the developer to guarantee the performance of the structures, which includes an infiltration test on each swale.

Who owns and controls the swales?

- The swales are part of the public's right-of-way and any alternations to the structures (beyond mowing, etc.) must be approved by ACHD.
- Homeowners and the homeowners association are responsible for all light maintenance of the swales including mowing and the removal of grass clippings, debris and trash, which keeps the swale functioning.

Flooding, standing water and other swale failures can be caused by:

- Damage/compaction of the swale during home construction, which reduces infiltration
- Contamination from sediment or washout from concrete trucks, which clogs the swale
- Poor sod placement (particularly with clay soils), which cuts infiltration
- Over-watering, which overwhelms the structure's capacity



Unapproved driveways, landscaping or other alterations:

Any modifications to swales must be approved in writing by ACHD.

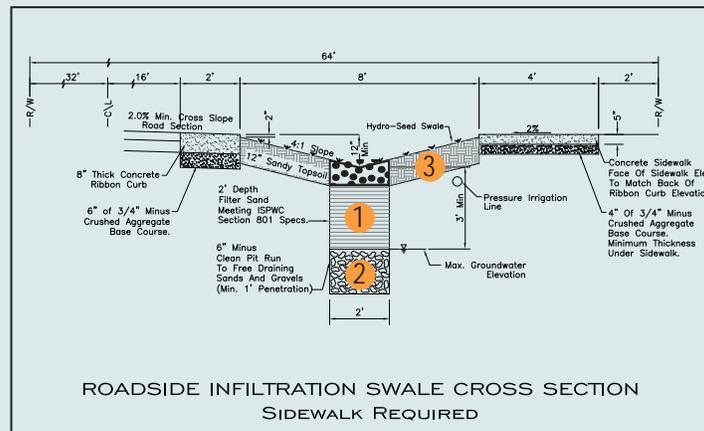
- Only one driveway per lot is permitted
- Maximum allowed driveway width is 20 feet
- Only one tree per lot line is allowed
- No rock, which can clog the filter, is allowed in the swale's bottom

Who is responsible to fix the swales?

The developer must provide working swales and remains responsible for the performance of the structures until they are tested and accepted by ACHD.

- After acceptance, ACHD will perform heavy maintenance of the swales but the light maintenance (mowing, debris collection, etc.) is the responsibility of the Homeowners Association.
- Negligence of the light maintenance or unauthorized modifications may result in the homeowners association or individual homeowner being responsible for the costs to correct problems.

Anatomy of a Swale



1. A sand window in the middle accepts and filters water
2. A layer of gravel or other "free draining" material allows the water to percolate
3. The sides and sometimes bottom of the swale are planted with grass