

Tiawasee Creek

Well Road Porous Pavement Sidewalks

What is the Problem?

The Perfect Storm... Too much stormwater flowing way too fast into our streams...

As part of the D'Olive Creek Watershed planning process, several water quality studies were undertaken, one of which was a sediment analysis. The studies and subsequent planning revealed that four factors had created an almost perfect storm of stormwater runoff and erosion problems in Daphne's watersheds.

Four Factors Influencing Stormwater Runoff and Erosion Problems

1. Extreme and rolling topography
2. Highly erodible soils
3. Over five feet of hard rainfall annually
4. Growing area of impervious cover (roads, buildings, etc.)

These watershed conditions and problems were primarily the result of extreme volumes and velocities of stormwater runoff from hardened urban landscapes causing stream instability resulting in high sediment loads.

Porous Pavement: Soak Up the Rain

What is it?

Alternatives to traditional pavement can help reduce runoff by infiltrating rainwater.

Primary Types of Porous Pavements

- Porous concrete
- Porous asphalt
- Permeable pavers



Benefits of Porous Pavements

- Filtration of stormwater pollutants
- Groundwater recharge
- Reduction of over-all stormwater runoff
- Reduction of stormwater management
- Reduction of heat island effect

Well Road Porous Pavement Demonstration Project

The Well Road Sidewalk Project demonstrates several types of porous pavement that can be used for driveways, sidewalks and parking lots.

At County Road 13, the sidewalk begins with traditional concrete which transitions into permeable pavers then back into traditional concrete sidewalks and finally terminates at Public Works Road into porous concrete. The project reduces the stormwater runoff and filters out pollutants that contribute to water pollution. The City hopes that citizens will consider this practice at their homes and businesses. The Well Road Constructed Wetland project was partially funded by the Alabama Department of Environmental Management.

Site Considerations

- Site Soils – permeable soils desired
- Depth of ground water table – 2 feet or greater below pavers
- Site slope – less than 2%
- Heavy traffic

2019 Materials and Installation Cost Comparison Per Square Foot

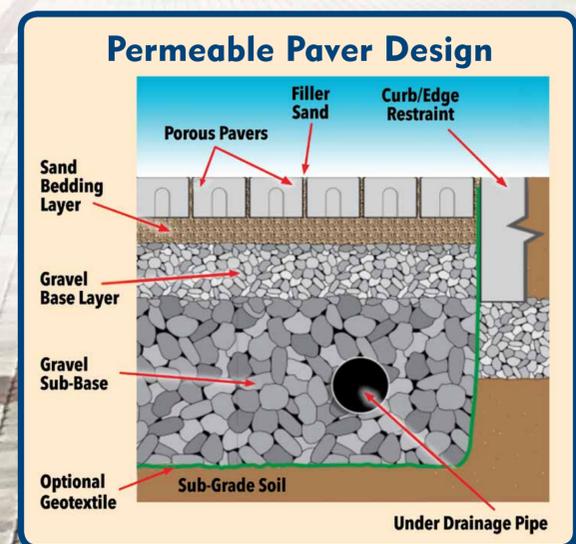
- Permeable Pavers \$9.00 - \$12.00
- Pervious Concrete \$6.00 - \$9.00
- Standard Concrete \$4.00 - \$6.00

Routine Operation and Maintenance

- To prevent clogging by sediment, periodic vacuuming may be required
- Periodic replacement of sand or filler gravel

Other Paver Locations in Daphne

- Centennial Park
- Gator Boardwalk
- Trione Park
- May Day Park



You Are Here!



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