

WARNERVILLE ROAD: MAY

Time Lapse Overview - Demonstrating 740% Improvement in Infiltration Rate from Native Conditions.



ANALYSIS NFILTRATI $\sum N$

ANALYSIS OF INFILTRATIO N

Area of Influence:

 Impervious vs. pervious surface area influencing the site.



ANALYSIS OF INFILTRATIO N

Soil at the Warnerville site is classified by the USDA Web Soil Survey as a SaA sandy loam, 0 to 3 percent slopes, MLRA 17.

- Typical profile includes:
 - Ap 0 to 9 inches: sandy loam
 - Bt1 9 to 15 inches: sandy clay loam
 - 2Bt2 15 to 21 inches: clay
 - 2Bkqm 21 to 37 inches: cemented material
 - 2C 37 to 79 inches: loam
- Hydrologic Soil Group: D
 - Typical infiltration between 0.00 and 0.06 in/hr.



ANALYSIS OF INFILTRATION

The site at Warnerville Road is estimated to originally hold 6 to 12 inches of standing water, particularly after rain events in excess of 0.30 inches. This water would remain standing for 1 to 2 weeks. The observed, prior infiltration at this site is consistent with the low end of the spectrum for its USDA Soil Group D classification.

Example Precipitation Event (in)	Approximate Time to Infiltrate (hrs)	Estimated Rate (in/hr)
0.30	336	0.000892

ANALYSIS OF INFILTRATION

Major Precipitation Events		Approximate Time to Infiltrate	Estimated Data (in/hr)
Date	Precipitation (in)	(hrs)	Estimated Kate (m/nr)
05/25/2018	0.24	32	0.0075
		Average Estimated Rate:	0.0075



ANALYSIS OF INFILTRATION

Estimated Rate (Original) (in/hr)	Estimated Rate (Post-Install) (in/hr)	Percent Increase (%)
0.000892	0.0075	740.80717488

It can be concluded, for the month of April, that the EGRP[®] has a quantifiable effective increase in infiltration rate at the site of 740.81% from native conditions, showing an approximate -60.52631578% decrease in performance from April, but given only one rain event above trace value for comparison.



BEFORE





MAY VISUALS

Time lapse photos are provided only for days that saw significant precipitation and following days of infiltration.

PRECIPITATION 05/25/2018 0.24″







PRECIPITATION

05/25/2018

0.24″





D. Com



PRECIPITATION 05/26/2018 0.00″





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SPYROINT LINKS



PRECIPITATION

05/26/2018

0.00″



