

# FULL DEPTH RECLAMATION (FDR) DESIGN



Stahl Sheaffer Engineering's FDR design expertise is grounded in our roadway engineering experience.

We understand the job requirements and the site conditions, so our FDR designs are customized and cost effective.

## Fast

- New expanded in-house lab (5,000 sf) provides more efficient processing.
- Quick design turnaround supports fast-track construction.



## Cost Effective

- Lab results combined with construction experience produce a cost effective design.
- Reduce construction costs by applying minimum additive necessary to generate the target strength.

## Reliable

- Experienced staff provides in-depth knowledge of roadway composition (more than 50 projects in 4 years).
- QC during construction.
- AASHTO Accredited Testing and Inspection Agency



STAHL SHEAFFER  
ENGINEERING



## Locations

### Soils & Materials Lab

325 Meadowlands Boulevard, Suite 2  
Washington, PA 15301  
Phone: (724) 206-9862  
Fax: (724) 206-0786

### Corporate Headquarters

301 Science Park Road, Suite 333  
State College, PA 16803  
Phone: (814) 689-1562  
Fax: (814) 689-1885

### Greater Pittsburgh Area

5000 Waterdam Plaza, Suite 120  
McMurray, PA 15317  
Phone: (724) 960-1111

### Susquehanna Valley

106 North High Street  
Selinsgrove, PA 17870  
Phone: (570) 374-4813

### Clearfield County

800 Leonard Street, Suite 2  
Clearfield, PA, 16830  
Phone: (814) 205-4012

### Ohio

1401 South Main Street, Suite 203  
North Canton, OH 44720  
Phone: (330) 794-5490

1101 Woodlawn Avenue, Suite 100  
Cambridge, OH 43725  
Phone: (740) 421-4216

### West Virginia

50 Clay Street, Suite 2  
Morgantown, WV 26501  
Phone: (304) 381-4281

engineering@sse-llc.com  
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## Geotechnical Services

Stahl Sheaffer Engineering's laboratory specializes in soils and asphalt testing. The lab performs, but is not limited to, all ASTM and AASHTO tests required to generate mix designs for full depth reclamation and cold in-place recycled asphalt projects. Tests include:

- Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- Standard Test Method for Particle Size Analysis of Soils
- Atterberg Limits (PL, LL, & PI)
- Standard Practice for Classification of Soils
- Density, Relative Density, Specific Gravity, and Absorption of Coarse Aggregate
- Standard and Modified Proctor Compaction for Soil and Soil-Cement Mixture
- Compressive Strength of Molded Soil-Cement Cylinders
- California Bearing Ratio of Laboratory-Compacted Soils
- Dynamic Cone Penetrometer in Shallow Pavement Application
- Standard Practice for Thin Walled Tube Sampling
- Density and Unit Weight of Soil in Place by Sand-Cone Method
- In-Place Estimation of Density and Water Content of Soil / Aggregate by Correlation with Complex Impedance Method
- Laboratory Determination of Moisture Content of Soils (AASHTO T 265)
- Expansion Index of Soils (ASTM D4829)
- Sand Equivalency Test (AASHTO T-176/ ASTM D2419)
- Organic Content in Soils by Loss on Ignition (AASHTO T-267/ ASTM D2974)
- Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method (AASHTO T 308)
- Sieve Analysis of Fine and Coarse Aggregate (AASHTO T 27 / ASTM C136)
- Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt (HMA) (AASHTO T 209)
- Bulk Specific Gravity of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface-Dry Specimens (AASHTO T 166)
- Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus (AASHTO T 245)
- Sulfate Content in Soils (Tex-145-E)

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