



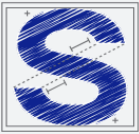
CASE STUDY: VILLAGE OF REFTON WASTEWATER TREATMENT PLANT Refton, PA



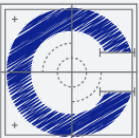
Dependable



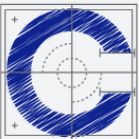
Experience



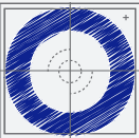
Safety



**Caring
People**



**Communication &
Collaboration**



**Outstanding
Service**

The Village of Refton is in Strasburg Township, Lancaster County. Refton is an older community and was served by on lot disposal systems (OLDS), many of which were in a failed or potentially failed state with insufficient room for replacement systems. Because of the small lot sizes within the village and the age of the OLDSs, the PA DEP encouraged Strasburg Township to provide public sewers and treatment for the village.

A low-pressure collection system was proposed for the village with treatment to tertiary levels by a recirculating sand filter (RSF) followed in series by a subsurface flow constructed wetland to accomplish denitrification and final disposal to a shallow placement at-grade disposal bed. Treatment process: Primary sedimentation, Equalization tank and Recirculating Sand Filter (RSF)/Subsurface Flow Wetland in series to achieve denitrification prior to final disposal in standard seepage bed. Design flow: 18,000 gpd peak day flow.

During the deep tank excavation, DESCOCO's excavation crew found rocky soil conditions which presented a challenge. The team encountered very hard granite rock throughout 1/3 of the excavation. Project Manager, Ryan Conrad, immediately had larger excavators delivered to the site in order to break through the rock. The crew was able to maintain the project schedule and keep excavation moving forward despite the rocky terrain. Another obstacle, a small sinkhole, was discovered after a large rain event while DESCOCO's crew was backfilling after the tanks had been set. Quick action was taken to mobilize a geotechnical engineer, vacuum excavator, concrete pump truck, and additional labor. With DESCOCO's fast action, the sinkhole was eliminated and there was no damage to any of the tanks.

DESCOCO proudly employs project managers, foreman and crew with years of experience. They keep jobs running smoothly and efficiently even when unexpected circumstances, like the ones on this project, arise.



Photo 1: Backfill after tanks set

Photo 2: Operational WWTP