Scope

The railroad had a serious problem with soil saturation in various spots along a 150-mile stretch of their track across one Midwestern state. Without sufficient drainage, rain water saturated the soil under and around the rails, destabilizing the track to potentially dangerous levels. As a result, the railroad was forced to reduce their trains’ speeds in this area to as little as 10 mph. In addition, the poor drainage problem began to impact neighboring farm lands, increasing the urgency for an immediate and permanent solution.

Solution

Hulcher provided the solution with a three-month, multi-faceted engineering project that addressed a combined 50 miles of troublesome spots across the 150-mile stretch of rail. The project involved a wide range of company-owned heavy equipment, including excavators, undercutters, dozers, wheel loaders and dump trucks. Hulcher crews reinforced the sides of hills, cleaned mud and debris from the tracks, engineered water run-off systems, and built ditches and French drains to stabilize the right-of-way and improve water drainage. In some areas Hulcher built roads along the right-of-way as well.

Outcome

By shoring up the soil around the track and providing durable, effective drainage systems for rain water, the project resulted in dramatic, long-term improvements to the track’s safety and reliability. The project had an immediate impact on the railroad’s operations as well. 120 minutes of slow orders in the area were reduced to less than 10 minutes and train speeds increased along this stretch from 10 mph up to 55 mph. By resolving the chronic drainage problems along the right-of-way, Hulcher was able to eliminate the pooling problems on neighboring properties as well.

KEY FACTS

PROJECT SUMMARY: Improve water drainage and stabilize land along right-of-way

DRAINAGE: Engineered French drains and run-off systems to manage rainwater

STABILIZATION: Cleaned debris from under tracks and restored stability by grading and excavating hills and terrain

RESULTS: Improved safety; reduced 120 minutes of slow orders to under 10 minutes and increased train speeds from 10 mph up to 55 mph