Sometimes field changes are necessary. The importance of utilizing test strips prior to starting a project cannot be understated.

BACKSTORY:
A distribution center that has hundreds of heavy semi loads coming in and out each month needs a strong and durable driving base. The transport shipping yard’s pavement was deteriorating and showing signs of deep subgrade failure. Soil samples determined that Base Stabilization with emulsion would be a good technique to fix the shipping yard.

PROBLEM:
While performing test strips to verify the mix design would perform, the field crew found heavy clay in the base course. The aggregate base thickness was not as deep as they had determined from the initial soil samples. Emulsion was not going to be a suitable candidate to stabilize the base because of the high clay content.

SOLUTION:
An alternate approach using 5% Portland cement tilled at 12” was tested to determine quality performance. It was proven to stabilize the existing aggregate and clay base and accepted by the soil engineer as well as the owner to complete their repair. The Base Stabilization with Cement gave the shipping yard the strength and durability it needed to withstand the heavy semi loads, and it worked so well that they have used it on other projects at their facility.

PHOTOS: