

Case Study

EZ Roll[®] Gravel Pavers

LOOKING BACK: NDS GRAVEL PAVERS HOLD UP ON BUSY COLLEGE CAMPUS AFTER 13 YEARS

NDS analyzed a project from over a decade ago to showcase how well its products withstand the test of time. A revitalization and reconstruction project at North Charleston's Trident Technical College (TTC) in 2010 included the addition of several parking spaces at the college's bookstore as well as two other areas around campus to allow for overflow capacity and increased traffic. The facilities team decided to use NDS EZ Roll[®] gravel pavers because they not only minimize surface water runoff, but also offer a sustainable alternative to traditional concrete or asphalt.

The EZ Roll gravel pavers were installed in three phases, the bookstore being the largest stage of the project. With 268 parking spaces overall, the reconstruction incorporated five rows of parking using permeable pavers – requiring approximately 4,800 sq. ft. of pavers.

The NDS team came up with a recommendation for the construction crew that worked around the bioswales in the islands between parking sections. The gravel pavers were placed to the sides to help the permeability of the surface that feeds the swales.

Another 7,200 sq. ft. of pavers were placed in other areas around the technical school, specifically in asphalt parking lots and driveways, allowing the pavers to look seamless in design and appearance once the gravel fill was added in.

FABRIC BASE AND LOCKING SYSTEM HELPED PRODUCT HOLD UP

After 13 years of continued use, the paving system has not rutted and is performing well, showing no signs of aging. NDS uses a high-quality nonwoven geotextile fabric that is permanently affixed to the pavers.



It is designed to prevent migration of the base and infill materials and keep the pavers securely connected. In addition, the pavers come in pre-assembled rolls with a lateral snap-lock latching system as well as steel stakes.

PAVERS ARE NEARLY MAINTENANCE-FREE

Trident College reported little need for maintenance or upkeep of the permeable parking areas. Over the years, there has been some vegetative maintenance to the bioswale areas, including weeding of the edges of the adjacent paving spots. And TTC's director of operations and facilities management reported that there has only been one time when additional gravel was brought in to refill some of the areas where the paver cells had become slightly visible. In addition, there have been zero signs of water ponding and permeability remains good even through the coastal area's heaviest storms.

PROJECT SUMMARY

PROJECT TYPE

Storage & Infiltration

PROPERTY

University

STAKEHOLDERS

Trident Technical College
Drainage Solutions
Baucom Grading

NDS PRODUCTS USED

12,000 sq. ft. EZ Roll Gravel Pavers