Santo Domingo Creek at Rock Lititz

Stream and Floodplain Restoration

Rock Lititz Properties proposed to construct a new campus facility on a 96-acre farm that had been rezoned to industrial land. The Santo Domingo Creek, a tributary to Lititz Run located within the property, had been significantly altered by historical human activities, including a realigned channel resulting from farming operations. As a result, legacy sediment was deposited in the flat valley. Streambank erosion and stream bed degradation had caused nutrient-rich sediment to impact downstream water quality. The goals of this project included restoring the degraded riparian corridor while reducing pollutant loads, enhancing infiltration and maximizing buildable area.

LandStudies designed a 17-acre floodplain restoration project that addresses the many needs of the campus. This project has restored ~3,136 linear feet of the Santo Domingo Creek by removing legacy sediment from the valley bottom and increasing floodwater storage potential. The increase of flood storage, and the resulting peak rate reduction eliminated the need for traditional stormwater basins and increased the amount of usable space for development. If traditional stormwater facilities were used, at least 2 of the proposed 10 parcels would have been significantly compromised and all would have had less buildable area. Additional water quality benefits include reduced stream bank erosion and promoted infiltration and filtration of runoff. Diverse native vegetation and walking trails have also become an aesthetic asset to the employees of the Rock Lititz campus as well as the local community.

Before Restoration

Stormwater Management-Infiltration Evaluation

Services

Landscape Design | Engineering | Geomorphic Assessment | Permitting | Construction Management | Plant Installation | Maintenance | Post Construction Monitoring

Client

Rock Lititz Properties

Location

Warwick Township, Lititz, PA

Land Studies