## BTC

## Project Profile



An addition to the Vespasian Warner Public Library building was constructed in 1991. A majority of the roofing system above the original building and addition consists of a steepslope roofing system covered with clay-tile shingles. As part of the addition, a new skylight system was constructed at the interface between the addition and original 2-story building.

The library had suffered from persistent water leakage at the interface between the addition and original building for many years. Previous repair attempts by others had proved ineffective in preventing the water leakage. As such, BTC was retained to perform an evaluation of the water leakage issues. BTC's evaluation revealed several deficiencies with the original design and construction of the skylight system and adjacent roofing system. Additionally, several previous repairs had been improperly implemented, unintentionally allowing incidental water leakage to penetrate below the roof membrane.

Upon review of BTC's report and repair recommendations, the library authorized BTC to proceed with repair design. The repairs consisted of removing and reinstalling the skylight insulated glass units using new glazing gaskets, and establishing a drainage path for incidental water that bypassed the skylight glazing system. Additionally, skylight repairs were carefully integrated with the adjacent roofing system. In order to provide this integration, a new PVC liner was installed along the valley between the clay tile roofing and the skylight. Localized replacement of the clay roof tiles was required to integrate the valley liner and the clay tile roofing. Asphalt-resistant PVC strips were used to integrate the valley liner with the new underlayment below clay tiles. New clay roofing tiles were carefully selected to match the appearance of the existing adjacent 100-year-old tiles.

BTC also provided bidding assistance and field observation services during the construction phase of the project.

Project Name: Skylight and Roof Repairs Vespasian Warner Public Library

Project Location: 310 North Quincy Street Clinton, Illinois 61727

Client:

Vespasian Warner Public Library 310 North Quincy Street Clinton, Illinois 61727

Approximate Construction Cost: \$180,000

Year Completed: 2014

Nature of Services: Evaluation of Roof and Skylight Water Leakage, Repair Design, Bidding Assistance, and Construction Phase Services



