



Case Study - Product: RR601 | 6lb Stabilizing Foam

Project: I-294 Illinois State Tollway



Challenge:

Various areas of a 42 mile stretch along I-294 had experienced settlement, leading to dips and bumps that posed safety challenges for drivers. The project had to be completed during the night, due to the high traffic volumes of the tollway during the day and the inability to have lane closures restricting steady traffic flow.

The project, due to size needed to be completed in five stages. The Illinois State Toll Highway Authority released a bid letting for the raising of the tollway

transition, approach, and sleeper slabs using high density polyurethane foam. They required an experienced contractor solve the problem.



Solution:

HMI Foams Providing Infrastructure Solutions

The specifications called for a 6 lb./cu.ft. foam with a minimum tensile and compressive strength of 90 psi. The work was to be performed in stages, five different areas needed to be raised along five lanes, approximately 100 feet on both sides of bridges, where the settlement had occurred. In order to inject the foam, 5/8" holes on a 4 foot grid pattern needed to be drilled. This project entailed drilling

approximately 2,000 access holes and pumping a total of 84,744 pounds of HMI RR601 polyurethane foam to complete the job. The areas of roadway raised varied in amounts from as small as 1/2" to as much as 5". This job successfully raised the areas required within the project scope ensuring a smooth roadway service for travelers.