



Market: State, Transportation

Client: JBC Planning & Engineering

Owner: University of North Florida

Project Profile

MAE provided geotechnical engineering services to explore possible cause(s) of settlement of a section of UNF Drive, and pavement coring to measure the thickness of the asphalt surface course for estimation of milling and resurfacing costs. During construction, MAE provided inspection and testing services to observe and document the asphalt milling and paving operations on Alumni Drive and for the settlement repair operation on UNF Drive.

MAE's responsibilities included observation and documentation of the milling and resurfacing along Alumni Drive to ensure conformance with plans, including:

- ◇ Thickness measurement of the milled sections,
- ◇ Roadway cross-slope measurements after milling and paving,

- ◇ Asphalt spread rate measurement,
- ◇ Asphalt temperature,
- ◇ Coring of the new asphalt for thickness and extraction / gradation testing,
- ◇ Striping and installation of traffic loops monitoring.

The UNF Drive repair consisted of excavating the existing pavement section and poor subgrade materials to a depth of about three feet, and backfilling with excavatable flowable fill to a depth of six inches below the adjacent pavement surface. Flowable fill was chosen as it allowed for quick repair with minimal disruption of campus traffic activities. After about four hours of curing time, the repair was completed by placing multiple layers of asphaltic concrete.

Services: Construction Engineering Inspection