

Fast Track Design: Interstate 74 Rehabilitation

IDOT, District 4, in Peoria, selected RJN Group, Inc. to provide Phase II engineering services for the preparation of contract plans, and special provisions for the resurfacing of I-74 from west of IL 78 (MP71) to west of Kickapoo-Edwards Road (MP82). The work consisted of survey, roadway resurfacing, pavement joint repairing, bridge repairs, guardrail modifications, drainage structure improvements, repair of eroded areas, ramp crossroad intersection improvements, traffic staging plans, and all other collateral work required to complete the project.



Bridges included within the project limits are:

- EB and WB I-74 over CH 69 (S.N. 072-0074 & S.N. 072-0075) — five span steel girder structures, 36 feet wide and 269 feet long
- EB and WB I-74 over TR 119 (S.N. 072-0077 & S.N. 072-0078) — These structures are three span steel girder structures, 42.5 feet wide and 116 feet long
- EB and WB I-74 over Kickapoo Creek (S.N. 072-0079 & S.N. 072-0080) — five span steel girder structures, 36 feet wide and 308 feet long



Scope of repairs to these structures included; substructure repair, new bearings, new expansion joints, and new bridge deck overlays. In addition to the deck and substructure repairs, the structures crossing Kickapoo Creek were protected from foundation undermining by redirecting Kickapoo Creek using rock jetties.

The RJN team completed the contract plans within the schedule established by the Department.

The engineer's estimated construction cost for this project was \$10,900,000.