

## U.S. Route 54 Highway Design Services

Missouri Department of Transportation – District 5

Since the early 1980's, the Missouri Department of Transportation had been developing a program of improvements to Route 54 at the Lake of the Ozarks to relieve traffic congestion.



Commercial development has expanded rapidly along Route 54 throughout the Lake of the Ozarks region. As a result of the existing development, traffic volumes exceed the capacity of the existing roadway during periods of each day, particularly during the summer months of the year when seasonal and weekend travelers arrive in the lake area.

As part of a larger overall project, this section of the Route 54 improvements consisted of one mile of four-lane

*Existing Route 54 (Future Osage Beach Parkway North).*

expressway, including an innovative One-Way Couple/Split Diamond Interchange. Context-sensitive solutions called for modification of the original design in order to reduce the footprint of the facility and decrease the impacts to the environment and right of way. The original four-lane divided section was modified by decreasing the median width and adding Jersey barriers. Guardrail was added and the “barn-roofed” side slopes were removed in favor of a constant slope, also reducing the length required for cross-road culverts.

While with another consulting firm, David Ellermann acted as project manager and lead designer. Project components included: preliminary plans, right of way plans, bridge survey reports (3), MSE retaining walls, enclosed drainage systems, large cross-road culverts, complex construction phasing, and extensive signing.

Due to changes within the overall project, the schedule for this section was successfully accelerated by six (6) months.



*Construction of the Osage Beach Parkway North overpass over the new Rte 54 Expressway.*