**TR-682: Short Span Prefabricated County Bridge Standards**

**Cost Effective Accelerated Bridge Construction Solution** with the following features:

- Pretensioned Concrete Box Beam option for all span ranges
- Non-pretensioned beam option in 30’ to 50’ span ranges
- Low lifting weights
- Limited to three beam depths and one beam width (minimal variation in beam forms)
- Modularized Construction Components
- Flexible Design Options
- Ultra High Performance Concrete joints for extended service life

**Design Permutations**

- 24-foot Roadway, 30-foot Span shown
- Ultimately resulted in 192 Design Combinations

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SHORT SPAN STANDARDS CRITERIA

- 24’ & 30’ Roadway Widths
- 0 degree, 15 degree and 30 degree Skews
- 30’ – 70’ span lengths (in 10’ Increments)
- Precast and CIP abutments
- Single-width Superstructure Components
- SL-1 Modular Steel Rail
- Targeted 45,000 lb. (max.) Lifting Weights

OTHER DESIGN CONSIDERATIONS

- Connections of Prefabricated Superstructure Elements
- Skew Effects on Design
- Bridge Cross Slope
- Wing Configuration (parallel or perpendicular to roadway)
- Live Load Distribution Factors
- Prestressed vs. Non-prestressed Beams
- Differential Beam Camber
- Accelerated Construction
- Minimize Number of Beam Depths