## **Project Profile**

## Eastbound and Westbound I-94 over the Belle River B01-3 and B01-4 of CS 77111, JN 85164A

St. Clair County, Michigan

**Spalding DeDecker Associates, Inc. (SDA)** performed complete staking (both engineer and contractor staking) on behalf of the Michigan Department of Transportation (MDOT) for the complete replacement of these bridges. Eastbound and westbound I-94 have separate bridges over the Belle River. The bridges were constructed by Dan's Excavating, Inc. using a 24-hour per day operation due to the fast-track nature of the lane rental project.

**Preparation prior to staking** included review of the plans, computing stakeout points, and preparing cut-sheets and haunch grade tables. Stakeout computations were performed in the office using AutoCAD and MicroStation platforms.

**Techniques used for staking** included performing radial stakeout for bridge reference points, standard and battered piles including location and cut-off elevations, coffer dams, mud mat, footings, abutments and piers, haunch grades, screed grades, sleeper slab elevations, and approach work. Slope staking was performed for the approach work prior to setting finished grade stakes for the pavement.

Deliverables included copies of cut-sheets, haunch grades, screed grades, and other staking reports.

## OWNER / CLIENT

Michigan Department of Transportation

**PROJECT START - END** 

March 2010 - September 2010

SDA PROJECT NO.

SM10-006

**SDA SERVICES** 

Construction Staking