First-Round Winner Innovations Challenge http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm April 2014 Prepared by Customer Relations Missouri Department of Transportation

Safe and Sound Redeck Templates



Description

The Safe and Sound Redeck Templates were developed to save designer and detailer time. The previous process involved assigning a designer, checker and detailer to the job. Those employees would spend about 300 hours and produce over 20 sheets of plans for a normal steel girder redeck job. With the new process, standard templates were designed for common spacing of girders, roadway widths and slab thicknesses. Because there were so many similar structures redecked in this project, the common details were not designed for each specific bridge. By using the standard templates, most of the redeck jobs were only seven plan sheets, which were generally completed by one detailer and one checker in about 100 hours.

Benefit

This innovation cut design and detailing time by nearly two-thirds for each job. During the Safe and Sound project, these templates were used to complete the plans for 225 structures, saving a significant amount staff time. Each project is unique, but it can reasonably be assumed that roughly 40,000 hours of staff time were saved. The project would not have been completed on time if the old way of doing it was used. Since the end of the Safe and Sound project, the templates have been used as standard practice for numerous projects. It has been fully implemented and the savings from this innovation continue to grow.

For More Information:

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Additional photos can be seen at the Innovations Challenge homepage: <u>http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm</u>

Bridge N0711 before redeck project with load posting.



LIMIT 40





Bridge N0711 after redeck project with load posting removed.

Bridge P0216 on Route C in DeKalb County before redeck project.

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