

Design Quality Index Report

7/16/2019

Contract ID 20180710004

Project ID 5001-00-71

County Crawford

Federal ID N/A

Region SW

Number of Factors Rated 16

Highway CTH C C

Total Factor Score 90.4

Construction on time? No

Project Index 5.7

Evaluation Date 12/10/18

Consultant Design Firm Team Engineering

Project Cost 364,531.34

Inhouse Design

Representing

Raters John Gantenbein - Buesing and Associates, Inc.

WisDOT

Remarks

Very good design other than the bridge should have been moved 5-10' north. If not moved, then wing #2 should have not tapered down 2' allowing a better backslope for the driveway.

Ratings

- 1 = Major problems, not constructable without major plan or design changes
- 2 = Major to moderate construction problems, moderate design or plan changes
- 3 = Moderate problems, constructable, minor design or plan changes
- 4 = Moderate to minor construction problems, minor to no design or plan changes
- 5 = Minor construction problems, no plan or design changes
- 6 = Minor to no construction problems
- 7 = No construction problems

<u>Factor</u>	<u>Rate</u>	<u>Comments</u>
Right of Way(adequate to construct)	3.0	Rather than buying a small amount of ROW on the south side, I think you should have obtained TLE's for clearing and grubbing and grading on the entire project. The County may have trouble in the future with a few of the cottonwood trees on the west side that overhang onto the ROW.
Horizontal Alignment(fit)	4.0	The bridge should have been shifted 5 - 10' to the north to hit the middle of the stream better. This also would have allowed a better backslope from Wing #2 to the driveway on the southwest corner.
Vertical Alignment (fit and drainage)	4.0	From 12+00 - 12+25 LT, there was no defined ditch designed. Even with a shallow ditch constructed, stormwater may still come off the hillside and cross the roadway. Also, stormwater may still be trapped and may overtop the roadway from 14+10 - 15+00 Lt. Before knocking down the high point at 14+10, it would have continued to drain to the north and set until it evaporated or infiltrated into the soil.
Earthwork	4.0	Did not want to disturb the slope behind the curb and gutter so they minimized the cut in this area.
Work Zone Traffic Control Plans	7.0	
Erosion Control Plans	5.0	Silt fence did not work well along the stream bank so there probably should have been some turbidity barrier in the quantities to help with containing the fill/riprap.
Construction Staging	7.0	
Utility Coordination	5.0	The telephone service crossing the road on the south side was not buried deep enough to excavate for the new subgrade.
Special Provisions	7.0	
Consistency between plans and special provisions	7.0	
Drainage	6.0	Standing water on the north west side beyond the project limits with no crossdrain or culvert seen?
Quantities	6.0	
Contract Time	7.0	Had to finish the project in 2019 due to late start by the Contractor.
Structures	AVG. 6.4	
Plans accurate and complete	7.0	

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Soils information and Foundation Details	6.0	The amount of piling was about half of what was needed.
Utility information accurate && complete	5.0	The fiber optic on the east side was moved, but not outside of the limits of the new wing on the north.
Special Provisions clear and concise	7.0	
Ease of assembly and construction	7.0	
Survey	6.0	
Soils	6.0	Did not need the SR fabric below the breaker because soils were not yielding to a loaded truck test.