

CRAB Model Document Outline

STANDARD OF GOOD PRACTICE – INSPECTION OF BRIDGES ON COUNTY ROADS

Chapter 136-20 WAC

Engineer's Report – WAC 136-20-060

The following outline is offered as a guide to help the County Engineer meet the Standard of Good Practice as contemplated in WAC 136-20-060, Engineer's Report. At a minimum the report shall include information satisfying the highlighted sections of the WAC presented below. However, in order for the information to be contextually relevant to your Board or Council, additional information, presented in logical progression, is essential. This report can be an excellent opportunity to highlight departmental needs, and the professional work done by you and your staff. At a minimum, the sections of the Model Outline with an asterisk() would need to be addressed.*

This Outline is based in part on the review and compilation of the Engineer's Reports submitted by 37 of the 39 counties for 2013 – D. Pohle, PE- 9/13/13.

WAC 136-20-060

Engineer's report.

Each county engineer shall furnish the county legislative authority with a written resume of the findings of the bridge inspection effort. This resume shall be made available to said authority and shall be consulted during the preparation of the proposed six-year transportation program revision. The resume shall include the county engineer's recommendations as to replacement, repair or load restriction for each deficient bridge. The resolution of adoption of the six-year transportation program shall include assurances to the effect that the county engineer's report with respect to deficient bridges was available to said authority during the preparation of the program.

I. INTRODUCTION*

Discuss the purpose of and requirement for the report and that this report is for the Board's or Council's use during the preparation of the Six Year Transportation Improvement Program.

II. EXECUTIVE SUMMARY/DISCUSSION

Good place to summarize the general health of the County's Bridge Infrastructure, the annual inspection effort, and discuss the funding climate and types of funding available. Discuss any inventory revisions such as jurisdiction transfers and new or removed structures. How many overweight permits were issued for county bridges since the last report? Good place to refer to graphs or tables that depict trending data, etc.

III. BRIDGE INSPECTIONS*

Discuss purpose and FHWA requirements, National Bridge Inspections Standards (NBIS), the County's program and staffing, inter-governmental agreements, consultant contracts, etc. Discuss Routine and Special Inspections, refer to or incorporate lists or tables of the bridges subject to each special inspection. Briefly discuss the bridge inventory system (Bridgeworks) and its required use and maintenance, as well as the physical bridge files required for every bridge in the National Bridge Inventory (NBI). *It is CRAB's position that it is not necessary to provide a paraphrase of each individual inspection, although you may certainly do so if you wish.*

IV. DEFICIENT BRIDGES*

Discuss what criteria makes a bridge deficient; Posted for weight limits, Structurally Deficient (SD) or Functionally Obsolete (FO). Explain Sufficiency Rating (SR). Refer to a listing or table of deficient bridges with specific detail about each bridge. A map of the locations of these bridges is beneficial.

V. POSTED BRIDGES*

Discuss the requirement for load rating and its purpose and use. Discuss when and why a bridge must be posted or restricted for weight limits. Were any bridges re-rated due to a weight limit issue? Refer to a listing or table with specific detail about each posted bridge. A map of the locations of these bridges is beneficial.

VI. SCOUR EVALUATION

Discuss what scour is and why it is an issue for bridges. What is a scour evaluation and when is it required? Do you have any scour action plans? Refer to a listing or table of scour critical bridges with specific detail about each bridge. A map of these bridges may be helpful.

VII. EMERGENCY REPAIRS & INSPECTIONS*

Discuss if there were any emergency repairs required since the last report. A good source for this information are the Critical Damage Reports required to be sent to WSDOT HLP Bridge Division. Emergency repairs tend to result from critical hits, overloads, flooding/scour, and rapidly advancing deterioration. Discuss any emergency inspection protocols.

VIII. MAINTENANCE ACTIVITIES*

Discuss the need for routine and ongoing maintenance, that routine inspections are critical to a successful and effective maintenance program. Discuss the Department's bridge crew, or lack thereof, and what activities constitute bridge maintenance. Funding or lack thereof could be discussed here. Graphs or figures depicting system trends can be referred to in this section.

IX. COMPLETED PROJECTS*

Discuss/describe projects completed since the last report.

X. CURRENT PROJECTS*

Discuss/describe ongoing projects.

XI. PROGRAMMED PROJECTS*

Discuss/describe projects that are slated to begin prior to the next report and those that have acquired funding.

XII. RECOMMENDED PROJECTS*

Discuss/describe major maintenance, repair, painting, seismic retrofit, rehabilitation, and replacement projects recommended by the County Engineer based in part on the information provided and summarized in this report.

Useful Figures, Lists, and Appendices:

Definitions/Glossary and Acronym list

Bar graph of average Sufficiency Rating of NBI bridges over time

Bar graph of average Sufficiency Rating of short-span bridges over time

Bar graph of average Sufficiency Rating of large culverts/drainage structures over time

Plot of Sufficiency Rating of all Bridges versus Age

Map of all Bridge locations, NBI, Short-span, or both

Map of Deficient Bridges (SD/FO)

Map of Posted Bridges

Map of Scour Critical Bridges

Map of Emergency Inspections by protocol

Lists/Tables:

 UBIT Inspections

 Underwater Inspections

 Fracture Critical Inspections

 Special Feature Inspections

 Routine Inspections

 Posted Bridges

 Deficient Bridges

 Scour Critical Bridges

Summary table of the number of bridges by type, length, function

Schematic Drawing of Typical Bridge Elements

The insertion of photos into the text or an Appendix of photos is beneficial for non-technical users of the report.

(This listing is not exhaustive nor is it suggested how many or how few should be used to supplement the report)