302 EXECUTIVE SUMMARY

The Executive Summary is a short (2-4 pages) recapitulation of the DCR document. The Summary should address the following key topics:

- Purpose and Need of the Project
- Alternatives Evaluated
- Recommended Design Concept
- Major or Controversial Issues
- Estimated Cost
- Conclusion

It is not necessary to address every aspect or technical consideration that is discussed in the main body of the report. The summary should focus on items presented in the report that are of critical interest to the Municipality such as an accurate concise description of the recommended design concept and the estimated cost. It should be clearly stated how the recommended design responds to the purpose and need of the project. Both the major benefits (i.e. improve traffic circulation, improve intersection safety) and the adverse impacts (i.e. displacement of coastal vegetation) should be summarized.

303 INTRODUCTION

The introduction is to prepare the reader for the subject matter that will follow in the body of the report. It should only be a few paragraphs in length and should provide a brief description of the project as well as the reason for preparing the Design Concept Report. The project description should be very general and should identify the project's location, the agency/municipality in charge of its implementation, and the source of funding that will be used for its design and construction. A statement can also be included that identifies how the project fits into the overall transportation infrastructure of the area.

304 TRAFFIC ANALYSIS

The collection of traffic data and the traffic projection procedures are discussed in Part 1, Section 203.03, Traffic Counts. The data will be used to analyze and shape the various alternatives and geometrics. This is an iterative process that results in identification of the number of through lanes, auxiliary lanes, turning lane requirements including storage lengths, signal warrants, level of service and capacity. Schematic diagrams of the roadway segments and intersections should be used to display the data. This information will be presented in the DCR along with a summary of the project traffic data including current and forecasted ADT values, peak hour and peak hour directional splits and percent of trucks.

Traffic signal recommendations will be included in the report. For each signal location, the following information should be provided:

- Phasing Diagram
- Controller Equipment
- Detection requirements
- CCTV
- Interconnection
- Power Source

On all projects where the primary justification, or an important justification, of the project is to improve safety, the DCR should include accident history data and an analysis of the causes of the accidents as well as a collision diagram. Estimates should be made of the accident reductions expected if the improvement proposal (or alternatives) is built. The monetary value of the accident savings should be calculated over the design period of the project (normally 20 years where geometric improvements are proposed).

A summary of the traffic analysis shall be included in the body of the DCR. The complete report is also included as a separate Appendix.

305 DESCRIPTION OF ALTERNATIVES

In consultation with the Municipality, the engineer shall develop alternatives to be evaluated that respond to the project purpose and need to varying degrees. The alternatives identified may include separate horizontal alignments, profile variations, typical section concepts etc., that can be evaluated in a matrix form to qualitatively and quantitatively review the alternatives to identify major differences. The engineering, social, economic and natural environmental impacts for each alternative under consideration must be addressed.