

SECTION 300 DESIGN CONCEPT REPORT

301 CONTENTS

The Abu Dhabi Municipality Road Section requires the preparation and approval of a Design Concept Report (DCR) prior to commencing final project design. The report is to be prepared under the direction of an experienced engineer designated by the Municipality. Part 1, Section 200, Design Concept Development, includes a discussion of the background information and data collection activities necessary to develop the design concept. Part 1, Section 300, Design Concept Report, contains a discussion of the specific requirements and content of a DCR.

The role of a DCR is to summarize the needs, alternatives, costs, and overall impacts of the proposed roadway or bridge project. The scope of the project is defined and the design criteria identified. The DCR is the project scoping document and the basis for selecting the project design. The basic roadway configurations shown in the DCR will be carried forward to the final design phase.

DCR *Table of Contents*

- Executive Summary
- Introduction
- Traffic Analysis
- Description of Alternatives
- Design Data
- Typical Sections
- Geometrics
- Interchange/Intersection Configurations
- Parking Study
- Hydrology and Hydraulics
- Subsurface Investigations
- Bridge Type Selection
- Utility Impact Analysis
- Socioeconomic Analysis
- Agriculture Impact
- Public Feedback
- Signing and Pavement Markings
- Lighting
- Construction Staging
- Cost Estimate
- Conclusion/Recommendations
- Drawings, Plans, Profiles, Typical Sections and Architectural Features

The preliminary engineering activities associated with the DCR involve preparation of numerous technical studies and reports, many of which are initiated in the data collection phase as described in Part 1, Section 200, Design Concept Development. These are prepared as stand alone documents and are included as an Appendices to the DCR. The DCR will summarize the results of these individual reports under the respective topic included in the DCR Table of Contents (See text box). Furthermore, the discussion under each topic will address interdisciplinary relationships necessary to coordinate all technical aspects of the design concept. The sections that follow provide guidance for the development of the technical studies and requirements for presentation of the material in the DCR.

301.01 FORMAT

The DCR will prepare and packaged as follows:

- DCR (Volume I) - Written portion of the report bound separately in A4 size.
- DCR (Volume II) - Drawings that accompany the report bound separately in A3 size.
- DCR (Appendices) - Technical Memorandums, Studies and Reports bound in A4 size. For smaller projects the documents should be bound together. Larger projects may require separate packaging of the reports, titled as Appendix A, Appendix B, etc.

Each document will include the following information on the cover:

- Municipality of Abu Dhabi, Road Section
- Design Concept Report
- Volume No. or Appendix No.
- Project Name and Route No.
- Project Number
- Vicinity Map Schematic with Project Termini noted
- Consultant Identification
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See Figure 300.01 to be used as the standard cover sheet for the DCR.