ROAD DESIGN MANUAL



VIRGINIA DEPARTMENT OF TRANSPORTATION

LOCATION AND DESIGN DIVISION

PREFACE

PURPOSE

This manual has been prepared to promote uniformity in design procedures for all designers and technicians involved in the development of plans for Virginia's highways. It is intended to serve as an informational and procedural guide and to be used in conjunction with specifications, standards, policy directives (State and Federal) and design policy manuals published by the American Association of State Highway and Transportation Officials (AASHTO). It is neither a textbook nor a substitute for engineering knowledge, experience or judgment. Tables and figures are included as aids in the solution of office and field problems.

MEANINGS OF "SHALL" OR "WILL", "SHOULD" AND "MAY".

To clarify the meanings intended in this manual by the use of these words, the following definitions apply:

- SHALL or WILL

A <u>mandatory</u> condition. When certain design criteria is described in a procedure or design of a street or highway, it is mandatory that this condition be met.

SHOULD

An <u>advisory</u> condition. Where the word "should" is used, it is considered to be advisable usage, recommended but not mandatory.

- MAY

A permissive condition. Design or application is optional.

VIRGINIA DEPARTMENTATION OF TRANSPORTATION ROAD DESIGN MANUAL

Copyright 2005, Commonwealth of Virginia

TABLE OF CONTENTS

CHAPTER 1C - GEOGRAPHIC LOCATIONS
CHAPTER 1D - PROJECT DEVELOPMENT
CHAPTER 1E - QUALITY CONTROL
CHAPTER 2A - LOCATION STUDY
CHAPTER 2B - INITIAL ROADWAY INVESTIGATION & PRELIMINARY FIELD
INSPECTION
CHAPTER 2C - PRELIMINARY DESIGN
CHAPTER 2D - PLAN DESIGN
CHAPTER 2E - FIELD INSPECTION
CHAPTER 2F - RIGHT OF WAY PLAN DEVELOPMENT
CHAPTER 2G - CONSTRUCTION PLANS
APPENDIX A - DESIGN GUIDELINES
APPENDIX A METRIC - DESIGN GUIDELINES
APPENDIX B - SUBDIVISION STREET DESIGN GUIDE
APPENDIX C - DESIGN DATA
APPENDIX C METRIC - DESIGN DATA
APPENDIX D - QUANTITY TABLES
APPENDIX D METRIC - QUANTITY TABLES
APPENDIX E - CONCURRENT ENGINEERING CONSTRUCTABILITY REVIEW

INDEX

Click On Desired Chapter or Appendixes

GUIDELINES

APPENDIX F – ACCESS MANAGEMENT STANDARDS

CHAPTER 1A - ORGANIZATION CHAPTER 1B - NOMENCLATURE