

CEDAR RAPIDS METRO DESIGN STANDARDS CHAPTER 5 – ROADWAY DESIGN

Supplemental to SUDAS Chapter 5

Replace SUDAS Chapters 5A and 5C with this section

CHAPTER 5A GENERAL INFORMATION

A. Concept

The primary consideration of this chapter is that all new roadways and major reconstruction of existing corridors provide for safe, efficient, and economic transportation for all modes of travel throughout the design life of the roadway. The values contained herein, specifically under design criteria, are to be considered basic design guidelines that will serve as framework for satisfactory design of new street and highway facilities. The Project Engineer is encouraged to develop the design based on this framework and tailored to particular situations that are consistent with the general purpose and intent of the design criteria through the exercise of sound engineering judgment.

Situations do arise that require special considerations; therefore, to eliminate hardships or problems, the Jurisdictional Engineer may allow an exception to the design criteria upon submittal of justification for such variances by the Project Engineer.

Cost effective design is encouraged along with the joint use of the transportation corridor and the consideration of the environment.

B. References

The design for roadway facilities should comply with the current edition of the following references, unless a specific edition is cited:

Jurisdiction Supplemental Design Standards.

The American Association of State Highway and Transportation Officials (AASHTO). A Policy on Geometric Design of Highways and Streets (“Green Book”).

The American Association of State Highway and Transportation Officials (AASHTO). Roadside Design Guide.

The U.S. Department of Transportation-Federal Highway Administration. Manual on Uniform Traffic Control Devices (MUTCD) and Traffic Control Device Handbook.

Transportation Research Board. Highway Capacity Manual.

The Institute of Transportation Engineers. Transportation and Traffic Engineering Handbook.

Speck & Associates, LLC. The Complete Streets Code, Final Draft, May 13, 2014.

Iowa Department of Transportation (IDOT) and Federal Highway Administration. Design Guides and Manuals for Federal Aid Routes (various).

C. Project Submittals

Projects are to be submitted to the Jurisdictional Engineer for review and acceptance. Projects involving IDOT must also be submitted to the IDOT District Office or Office of Local Systems, as appropriate.