CITY OF MARION, IOWA

GENERAL SUPPLEMENT TO SUDAS DESIGN MANUAL

This General Supplement to SUDAS Design Manual amends or supplements the Statewide Urban Design and Standards (SUDAS). All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Specifications will have the meanings indicated in SUDAS.

Chapter 1 – General Provisions

1C-1 Submittal Procedures

Add the following:

“Ownership of Data
All information collected by the designer and/or surveyor for City improvement projects shall become property of the City of Marion and are subject to open records requests.”

Chapter 2 – Stormwater

2A-1 – General Information

C. Conditions

1e

Add the following:

“Lot drainage slopes that have a design slope less than 2% shall have a minimum of a 6” tile installed.”

D. Unified Sizing Criteria

1. General Information:

Replace Table 2A-1.01 with the following:
Table 5C-1.02: Acceptable Roadway Elements

Add the following to Footnote 15 for Min. horizontal curve radius (ft):

“For local residential streets a minimum centerline radius of 150’ is allowed. Radius of 100’ may be allowed for local residential streets for cul-de-sacs.”

5C-2 – Geometric Design Elements

4.b Vertical Curves

Remove:

“...For both sag and crest vertical curves with a low algebraic difference in grade, sight distance restrictions may not control the design of the curve. In these cases, rider comfort and curve appearance are the primary considerations for vertical curve design. Generally, vertical curves with a minimum length (in feet) equal to three times the design speed (in mph) are acceptable...”

Add:

“Shall be per approved design for constructability as approved by the City.”

Q. Intersection Radii

Add:

“Intersection radii may be modified with permission of the City Engineer”

City of Marion | Engineering Department
Table 5C-2.09: Curb Return Radii Based Upon Roadway Classification
For Arterial to Collector and Collector to Arterial Replace:
“Special* with 35 feet”

5F-1 Pavement Thickness Design
D. Determining Pavement Thickness
Add:
“Minimum pavement section for new rigid pavements is 7 inch PCC with 6 inch granular subbase and subbase preparation per SUDAS Standard Specifications Section 2010.”
“Minimum pavement section for all reconstruction pavements is 7 inch PCC with 12 inches granular subbase on geogrid and subbase preparation per SUDAS Stand Specifications Section 2010.”
“Minimum HMA pavement section shall match structural equivalent of rigid pavement above and only allowed with permission of the City Engineer.”

5L-4 Driveway Design Criteria
B. Width Measurement
Remove and Replace:
1. Local street residential widths shall be measured on the street side of the sidewalk. If no sidewalk is present, the width shall be measured at the right of way.
2. All other widths shall be measured at the right of way or end of driveway curb radius onto the property if the distance is needed to fully construct the allowed radius per Table 5L-4.01”

Table 5L-4.01: Driveway Dimensions
Modify Residential Widths:
“Maximum widths are 24 feet for one or two car garage, and 36 feet for three or more car garage. Accesses on cul-de-sac bulbs will have a maximum width of 24 feet, or as approved by the City.”

3. For individual properties, the number of entrances should be as follows:
a. Single Family (SF) Residential
Add:
“Maximum total width of accesses combined shall not exceed 36 feet if more than one is allowed, or as approved by the City”