

PAVEMENT DESIGN CRITERIA

Identification of roadway classification for pavement design.

Type A - Local street with low traffic volume.

Type B - Collector Type streets or any streets expected to become bus routes  
(Design Year DLT  $\leq$  2500).

Type C - Arterial Type streets - all streets expected to carry significant truck traffic  
(Design Year DLT  $>$  2500).

A.) Design procedure Type A roadway - use greater of:

1. The Standard Minimum Section:  
3.25" Asphaltic Pavement  
10" Crushed Aggregate Base Course
2. Pavement design based on Section 14-10-5 of the Wisconsin Department of Transportation's Facilities Development Manual. Use serviceability index (Pt) = 2.5, ESAL = 10 18K per day, and the soil support value given the existing field conditions. The Minimum Section is based on the above parameters and a soil support value of 3.5.

B.) Design Procedure Type B roadway - use greater of:

1. The Standard Minimum Section:  
4.25" Asphaltic Pavement  
10" Crushed Aggregate Base Course
2. Pavement design based on Section 14-10-5 of the Wisconsin Department of Transportation's Facilities Development Manual. Use serviceability index (Pt) = 2.5, ESAL = 20 18K per day, and the soil support value given the existing field conditions. The Minimum Section is based on the above parameters and a soil support value of 3.5.

C.) Design Procedure Type C roadway - use greater of:

1. The Standard Minimum Section:  
5.25" Asphaltic Pavement  
10" Crushed Aggregate Base Course
2. Pavement design based on Section 14-10-5 of the Wisconsin Department of Transportation's Facilities Development Manual. Use serviceability index (Pt) = 2.5, and the soil support value given the existing field conditions. The ESAL shall be calculated based on Section 14-1-5.

4.06

2004

CITY OF MADISON  
ENGINEERING DIVISION

PAVEMENT DESIGN  
CRITERIA

STANDARD DETAIL DRAWING 4.06