## PAIKY--PAVEMENT DESIGN TABLES--KY Design Memorandum 6A-99

| Traffic Characteristics | 98% Autos, 2% Single Unit Trucks | | | | | 92% Autos, 5% Single Unit Trucks, 3% Combination Trucks | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Estimated ESALs | 7,500 | 15,000 | 30,000 | 60,000 | 120,000 | 250,000 | 500,000 | 1,000,000 | 2,000,000 | 4,000,000 | 8,000,000 |
| Average Daily Traffic | < 100 ADT | < 200 ADT | < 400 ADT | < 700 ADT | < 1500 ADT | <700 ADT | <1500 ADT | <3000 ADT | <6000 ADT | <12000 ADT | <24000 ADT |
| **Characteristics of Subgrade Materials:** | **Highly Compressible Fine Grained Soils--Liquid Limit Greater Than 50** | | | | | | | | | | |
| **Materials** | **CBR** | | | | | | | | | | |
| | **CBR 1** | **Stabilization is Recommended** | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 4.00 | 5.00 | 5.50 | 7.00 | 7.50 | 8.00 | 9.00 | 10.00 | 10.50 | 11.00 | 11.50 |
| Aggregate | 4.00 | 4.00 | 6.00 | 6.00 | 8.00 | 8.00 | 8.00 | 8.00 | 12.00 | 12.00 | 16.00 |
| | **CBR 2** | **Stabilization is Recommended** | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 3.50 | 4.75 | 5.25 | 6.00 | 6.50 | 7.50 | 8.50 | 9.50 | 9.75 | 10.50 | 11.00 |
| Aggregate | 4.00 | 4.00 | 6.00 | 6.00 | 8.00 | 8.00 | 8.00 | 8.00 | 12.00 | 12.00 | 16.00 |
| | **CBR 3** | **Stabilization is Optional** | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 3.25 | 4.00 | 4.50 | 5.00 | 6.00 | 7.00 | 8.00 | 8.50 | 9.50 | 10.25 | 10.50 |
| Aggregate | 4.00 | 4.00 | 6.00 | 6.00 | 6.00 | 8.00 | 8.00 | 8.00 | 8.00 | 12.00 | 12.00 |
| **Characteristics of Subgrade Materials:** | **Low Compressible Fine Grained Soils--Liquid Limit Less Than 50** | | | | | | | | | | |
| | **CBR 4** | **Stabilization Optional** | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 3.00 | 3.50 | 4.00 | 4.50 | 5.50 | 6.50 | 7.50 | 8.00 | 9.00 | 10.00 | 10.25 |
| Aggregate | 4.00 | 4.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 8.00 | 8.00 | 12.00 |
| | **CBR 5** | **Stabilization Optional** | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 2.75 | 3.25 | 3.50 | 4.00 | 5.00 | 6.00 | 7.00 | 7.75 | 8.50 | 9.50 | 10.00 |
| Aggregate | 4.00 | 4.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 8.00 | 8.00 | 12.00 |
| **Characteristics of Subgrade Materials:** | **Coarse Grained Soils, Sand and Sandy Soils, Gravel and Gravelly Soils** | | | | | | | | | | |
| | **CBR 6** | | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 2.50 | 3.00 | 3.25 | 3.50 | 4.00 | 5.50 | 6.50 | 7.50 | 8.25 | 9.00 | 9.75 |
| Aggregate | 4.00 | 4.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 8.00 | 12.00 |
| | **CBR 7** | | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 2.50 | 2.75 | 3.00 | 3.25 | 3.75 | 5.00 | 6.00 | 7.00 | 8.00 | 8.75 | 9.50 |
| Aggregate | 4.00 | 4.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 8.00 | 8.00 |
| | **CBR 8** | | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 2.50 | 2.50 | 2.75 | 3.00 | 3.50 | 4.50 | 5.50 | 6.50 | 7.50 | 8.50 | 9.25 |
| Aggregate | 4.00 | 4.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 8.00 |
| **Characteristics of Subgrade Materials:** | **Rock (limestone, durable sanstone, durable shale, nondurable sandstone), Select Granular Materials** | | | | | | | | | | |
| | **CBR 9** | | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 2.50 | 2.50 | 2.50 | 2.75 | 3.25 | 4.25 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 |
| Aggregate | 4.00 | 4.00 | 4.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 |
| | **CBR 10** | | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 2.50 | 2.50 | 2.50 | 2.50 | 3.00 | 4.00 | 4.75 | 5.75 | 6.75 | 7.50 | 8.75 |
| Aggregate | 4.00 | 4.00 | 4.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 |
| | **CBR 11** | | | | | | | | | | |
| AC Surface | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| AC Base | 2.50 | 2.50 | 2.50 | 2.50 | 2.75 | 3.75 | 4.50 | 5.50 | 6.50 | 7.25 | 8.50 |
| Aggregate | 4.00 | 4.00 | 4.00 | 4.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 |