

4.4M Shoulders

4.4.2M Shoulder Width

4.4.2.1M Design Domain: Quantitative Aids

The TAC Subsection 4.4.2.1 is not applicable to the Department's highways as written.

The required shoulder widths for 2-lane rural highways are in Tables 4.4.1M and 4.4.2M below:

Table 4.4.1M: Shoulder Width and Type on Two-Lane Highways – New Construction and Major Reconstruction

Highway Classification	Projected AADT	Minimum Shoulder Width	Shoulder Type
Freeway, Expressway & Primary Arterial	> 2000	3.0 m	Fully Paved
	$400 \leq 2000$	2.5 m	Partially Paved
Secondary Arterial & Collector	> 2000	2.5 m	Fully Paved
	$1000 \leq 2000$	2.0 m	Partially Paved
	$400 \leq 1000$	1.0 m	Fully Paved

Note: Partially paved shoulders are to have 0.8 m paved adjacent to the lane and the remaining gravel.
Partially paved shoulders are to be fully paved along all horizontal curves.

Table 4.4.2M: Shoulder Width and Type on Two-Lane Highways – Rehabilitation for All Overlays

Highway Classification	Projected AADT	Minimum Shoulder Width	Shoulder Type
Freeway, Expressway & Primary Arterial	> 2000	2.5 m	Fully Paved
	$0 \leq 2000$	1.0 m	Fully Paved
Secondary Arterial & Collector	> 2000	2.0 m	Fully Paved
	$1000 \leq 2000$	1.0 m	Fully Paved
	$0 \leq 1000$	0.5 m	Fully Paved

Note: If minimum widths cannot be achieved without grade widening, shoulder widths should be maximized within the existing cross section.
Partially paved shoulders are to be fully paved along all horizontal curves.

The required shoulder widths for rural highways with four lanes or greater are in Table 4.4.3M below:

Table 4.4.3M: Shoulder Width and Type on Divided Highways with Four Lanes or Greater

Highway Classification	Project Type	Left Shoulder Width	Left Shoulder Type	Right Shoulder Width	Right Shoulder Type
All Functional Classifications	New Construction & Reconstruction	1.5 m (4 Lanes) 2.5 m (>4 Lanes)	Fully Paved	3.0 m	Fully Paved
	Rehabilitation	1.0 m (4 Lanes) 2.5 m (>4 Lanes)	Fully Paved	2.5 m	Fully Paved

Guidelines for shoulder widths in other shoulder applications are provided below. Note that all scenarios presented are to have fully paved shoulders.

- For interchange direct ramps:
 - Right shoulder width: 3.0 m
 - Left shoulder width: 1.5 m
- For interchange semi-direct and loop ramps:
 - Right shoulder width: 2.5 m
 - Left shoulder width: 2.0 m
- Shoulder width adjacent to climbing lanes and passing lanes:
 - The lesser of 2.0 m or the existing shoulder width
- Shoulder widths in the vicinity of rural intersection treatments beyond simple intersections:
 - No less than 1.5 m
- Shoulder widths for paved service roads:
 - No less than 1.0 m
- A 3.0 m shoulder is required 60 m from the centreline of the following accesses and intersections in each direction and on both sides on the Provincial Trunk Highway or Provincial Road:
 - Public road connections where the highway AADT > 1500
 - Industrial accesses
 - Commercial accesses
 - Accesses to residential developments with 10 or more housing units