

Both sides of the entrance throat need to be protected. The length of the entrance-side throat equals the exiting throat. When entering vehicles stop to turn left there must be sufficient queuing length to prevent other entering vehicles from backing up on to the highway. Minimum connection throats are provided in the table below.

Summary of Entrance Throats	
Number of Egress Lanes (left, thru and right)	Minimum Throat Length
	Feet
1	35 *
2	75
3	200
4	300

TABLE 4-2

Source: *Transportation & Land Development 2nd Edition 2003*, Koepke and Stover

* Inadequate entrance length can also produce hazards to entering traffic on site. Particularly where the on-site parking can back out of and block the entrance and prevent a vehicle from entering. To avoid this problem, a distance of at least 50 feet is used on entrance length where back out parking may interfere with entry movement.

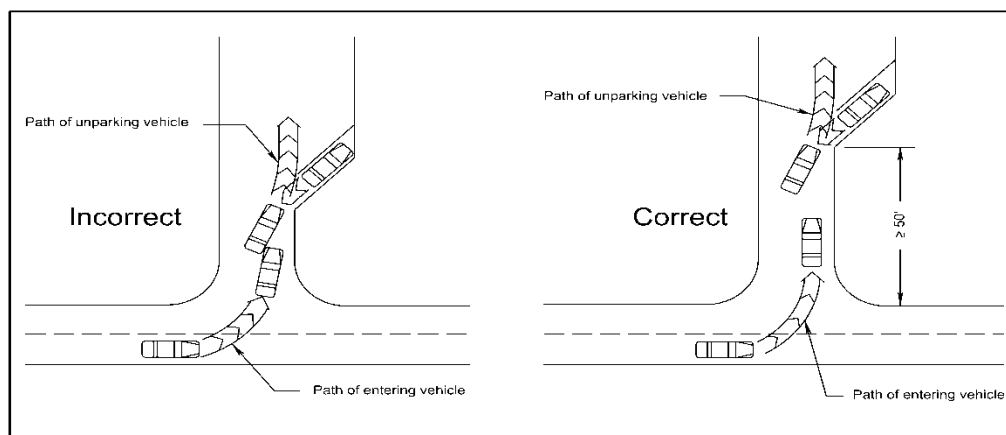


FIGURE 4-1A ENTRANCE THROAT DETAIL

Entrance Pavement: The type and depth of the pavement shall be clearly indicated on the plans and/or permit application. The pavement of commercial entrances, turn lanes and tapers shall be of asphalt, concrete, or pavers that is of a construction comparable to the pavement of the adjacent roadway.

Entrance Grade: The vertical alignment of all access locations is designed to minimize vehicle bounce and prevent high-centering of vehicles with a maximum clearance of 4 inches. The maximum grade for a commercial entrance is 8%.

Steeper access entrances require the District L&D Engineer approval. A level area (maximum 2% grade) 20 feet in length is provided at each access to ensure proper sight distance from the access. The level area is measured from the highway edge of pavement or from the back of sidewalk, whichever is appropriate based on site-specific conditions.

* Rev. 7/14