

CITY OF ROCHESTER HILLS
ENGINEERING DESIGN STANDARDS

CHAPTER 9

Sidewalks

A. Plans and Specifications – Submittal Procedure

1. Plans and Specifications for Sidewalks may be submitted either as part of a site development package, or as a separate entity for a specific location in accordance with ~~section~~ **Chapter 1, General Requirements and Submittals.**

B. Plans and Specifications – Design Criteria

1. Sidewalks shall generally be located one foot (1') off the right-of-way line and parallel to such line.
2. ~~Sidewalks shall be 5 feet wide, with expansion joints 1 1/2 inches deep, at 5 foot intervals.~~
2. Sidewalks shall generally conform to the grade of the existing topography. Transverse slopes shall not exceed two percent (2%) and longitudinal slopes shall not exceed eight percent (8%) **for mainline sidewalks, with 5% to 7% being the recommended range.** ~~Sidewalks slopes within 100' of a road intersection shall not exceed 5 percent.~~ **Sidewalk ramps shall not exceed five percent (5%) longitudinal slope or two percent (2%) cross-slope.**
3. Mastic expansion joints shall be provided wherever the Sidewalk abuts existing pavement.
4. Sidewalks shall have smooth transitions and gentle curves. No sharp edges or abrupt changes in alignment are allowed.
5. Plans for Sidewalks shall include existing contours at a minimum of two-foot (2') intervals. Proposed grades along the centerline of the Sidewalk shall be at twenty-five foot (25') intervals.
6. In general, Sidewalks shall be at a higher elevation than the street, and slope transversely toward the street at two percent (2%).
7. Where Sidewalks meet driveways, they shall run continuously through the **driveways.** The slope of the **driveways** shall be designed to meet the Sidewalk.
8. At street intersections sidewalk ramps shall be used to meet the existing street grade. If existing curb is involved, the curb shall be removed and the sidewalk ramped to meet the pavement. No curb cuts shall be used. ~~A typical detail shall be provided with the plans.~~ **All sidewalk ramps shall conform with the latest MDOT sidewalk ramp and detectable**

warning detail R28 D Series and the latest American with Disabilities Act (ADA) requirements.

9. All trees, power poles, signs, guy wires, hydrants, and any aboveground structures in the right-of-way shall be accurately shown.
10. All underground utilities in the right-of-way shall be shown.
11. Sidewalks shall be located a minimum of ten feet (10') from the edge of pavement, regardless of the road cross-section.
12. A minimum three feet (3') lateral clearance should be maintained on either side of the sidewalk to fixed objects such as utility poles, trees, hydrants, etc.
13. A minimum eight feet (8') vertical clearance should be maintained above the surface of the sidewalk to fixed objects such as utility poles, trees, sign, etc.

C. Materials:

1. Sidewalks shall be four inches (4") thick, air-entrained concrete, at 3,500 psi compressive strength. Sidewalk thickness shall be increased to 6-inches through driveways and at ramps.
2. Sidewalk base shall be six inches (6") of MDOT Granular Material Class II ~~2NS~~ Sand, compacted to ninety-five percent (95%) maximum density.
3. Two foot (2') wide shoulders shall be sloped ~~graded gently~~ away from the sidewalk at a maximum of two percent (2%) ~~and be either seeded and mulched, or sod.~~
4. ADA detectable warning plates shall be color contrasted and consist of pre-formed plastic/fiberglass materials. Pre-formed plastic detectable warning plates shall be brick red in color. Stamped concrete is not acceptable.