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 *Chapter 1, General Requirements and Submittals*.

B. Plans and Specifications – Design Criteria

- 1. Sidewalks shall, in general, be located completely within the right-of-way, and be located one foot (1') from the edge of the City's Master Plan right-of-way.
- 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 five to seven percent (5% 7%) being the recommended range. 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. Sharp edges or abrupt changes in alignment are not 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 a minimum half percent (0.5%) and a maximum slope of 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. Curb cuts shall not be used. All sidewalk ramps shall conform to the latest MDOT sidewalk ramp and detectable warning detail R28 Series, and the latest American with Disabilities Act (ADA) requirements.
- 9. All existing trees, public utilities, utility poles, signs, guy wires, hydrants, driveways 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. The distance from the edge of the sidewalk to the back of curb or edge of the road shall clearly be called out on the plans. Sidewalks shall not be placed any closer than ten feet (10'), unless otherwise approved by the City Engineer.
- 12. A minimum three-foot (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-foot (8') vertical clearance should be maintained above the surface of the sidewalk to fixed objects such as utility poles, trees, signs, etc.
- 14. Public sidewalk construction within Rochester Hills typically consists of 5-foot square panels by and intended for public use. Maintenance of sidewalks located in right-of-way or easement per City ordinance is the responsibility of the adjacent property owner.

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 six inches (6") through driveways and at ramps.
- 2. Sidewalk base shall be six inches (6") of MDOT Granular Material Class II Sand, compacted to ninety-five percent (95%) maximum density.
- 3. Two-foot (2') wide shoulders shall be sloped away from the sidewalk at a maximum of two percent (2%).
- 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.