

# Legislative File No: 2008-0141

- **TO:** Mayor and City Council Members
- **FROM:** Roger H. Rousse, Director of Public Service
- **DATE:** March 31, 2008

**SUBJECT:** Engineering Design Standards and Detail Sheets

## **REQUEST:**

The Department of Public Services requests that the Rochester Hills City Council adopt the following amendments to the Rochester Hills Engineering Design Standards and Detail Sheets:

### **Engineering Design Standards**

- General Requirements and Submittals
- Water Distribution System
- Sanitary Sewer System
- Stormwater Management
- Grading
- Road Paving
- Widening Lanes
- Driveway Approaches and Drainage Ditches
- Sidewalks
- Pathways
- Soil Erosion and Sedimentation Control Plans

### **Engineering Detail Sheets**

- Water Main Standard Details (2 Sheets)
- Sanitary Sewer Standard Details (2 Sheets)
- Storm System Standard Details (1 Sheet)

# **BACKGROUND:**

The Rochester Hills City Council adopted the current Engineering Design Standards in February, 2003. Over the past few years materials and installation methods have changed. With the exception of the Stormwater Management design standards, minor house cleaning items were also addressed.

The Stormwater Management standards were completely rewritten in order to comply with the National Pollutant Discharge Elimination System (NPDES) Phase II rule, become current with technology, and to better protect the waters of the City of Rochester Hills. Major changes to the stormwater management design standards include:

- 1. Require new sites to calculate storm water detention storage based on a 25-year design storm not a 10-year event.
- 2. Require that the storm water runoff be given pre-treatment to improve water quality.
- 3. Require storm water runoff volume reduction through onsite use and or ground water recharge.
- 4. Improve criteria for protecting downstream drainage courses.
- 5. Better define flood control and operation & maintenance responsibility.

The purpose of updating the Engineering Design Standards is to provide the City with an updated and comprehensive basis of design and construction of public works and private development improvements.

The current Engineering Detail Sheets date back as early as the 1970's. The detail sheets were updated in regards to the materials, methods of construction and for appearance purposes. Some of the details were so old, some of the text could not be read.

### **RECOMMENDATION:**

The Department of Public Services recommends that the Rochester Hills City Council adopt the Engineering Design Standards and Detail sheets to become effective immediately.

APPROVALS:	SIGNATURE	DATE
Department Review		
Department Director		
Mayor		
City Council Liaison		

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