CITY COMMISSION POLICY

GRAND RAPIDS MICHIGAN	**NUMBER:** 1000-24	**HISTORY** FILE# 87422 DATE 02/06/18
	DATE: **February 6, 2018**	
	DEPARTMENT: Environmental Services	

SUBJECT: Green Infrastructure Portfolio Standard (GIPS) Policy

PURPOSE: To establish measureable goals for water quality and infiltration volume for green infrastructure constructed in City projects.

DEFINTION: Green Infrastructure: An approach to water management that uses natural or engineered systems that mimic natural processes to reduce water pollution and flooding, enhance overall environmental quality and provide utility services. Unlike conventional stormwater management ("gray infrastructure") which uses curbs, gutters and underground piping to convey water away from developed landscapes, green infrastructure relies heavily on water infiltration, evapotranspiration, and collection to capture raindrops where they fall. Green infrastructure is a more cost effective means of maintaining healthy waters, providing multiple environmental benefits and supporting sustainable communities as well as providing stormwater treatment, flood mitigation, air quality management, energy savings, landscape enhancement, increased property values, and other benefits to communities.

POLICY:

1. Any City of Grand Rapids project constructed within the municipal boundary of the City shall be counted toward the GIPS goals.
2. Specific emphasis for projects within watersheds that have total maximum daily loads (TMDLs) of specific pollutants should be considered in the design and planning phases to address those specific needs. In Grand Rapids, the watersheds that have TMDLs include the following:

Watershed	TMDL

Buck Creek	*E. Coli*
Grand River	*E. Coli*
Plaster Creek	*E. Coli* and Biota
Unnamed Tributary to the Grand River	Biota

3. The estimated baseline flow of 1 inch of runoff (first flush) from the entire City of Grand Rapids is 10 billion gallons annually.

4. The GIPS goal is to infiltrate 1.0% of the baseline first flush runoff volume over the course of 5 years and to provide water quality treatment for an additional 0.25% of the first flush volume on top of the infiltration volume over the course of 5 years.

GIPS Goal	Percent of Baseline First Flush Volume	Million Gallons per 5 years
Infiltration	1.0%	100
Quality	0.25%	25

5. The capacity of the green infrastructure will be based on the engineer's estimate for the specific green infrastructure installed. Two green infrastructure types commonly used throughout City projects are included in the table below. These values may be used as estimates for the average leaching basin and street tree.

Practice	Gallons Infiltrated Annually
Street Tree	600
Leaching* Basin	60,000

*when accepting a maximum of 5,000 square feet of runoff

6. If trees or other green infrastructure types currently in place and in good working order are removed, the approximate water quality benefit of the feature removed will be counted against the total water quality benefit for the project. Only the net increase of the water quality benefit for each project will be used.

7. The volume of the runoff infiltrated and treated each year will be based upon the numbers that the City Engineer's office reports annually to the Stormwater

Oversight Commission for their annual investments of the Vital Streets tax extension.