

CITY OF ARTESIA

October 8, 2013

AGENDA ITEM

SUBJECT: INTRODUCTION OF A GREEN STREETS POLICY

Summary:

The Municipal Separate Storm Sewer System (MS4) Permit (Order No. R-2012-0175) was adopted by the California Regional Water Quality Control Board, Los Angeles Region on November 8, 2012.

Municipalities requires Permittees electing to prepare a Watershed Management Program or an Enhanced Watershed Management Program under this Permit to demonstrate that there are green streets policies in place and/or commence development of a policy(ies) that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have a draft policy within 6 months of the effective date of the Order.

The MS4 Permit does not strictly define a green streets policy, however it does include a reference to the USEPA *Managing Wet Weather with Green Infrastructure: Green Streets* guidance document as follows:

“(1) Development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:

....

(g) Street and road construction of 10,000 square feet or more of impervious surface area shall follow USEPA guidance regarding *Managing Wet Weather with Green Infrastructure: Green Streets* (December 2008 EPA-833-F-08-009) to the maximum extent practicable. Street and road construction applies to standalone streets, roads, highways, and freeway projects, and also applies to streets within larger projects.”

In the absence of specific guidance for green streets policies by the MS4 Permit, the purpose of this Staff Report is to provide an outline of proposed green streets policies for the city of Artesia consistent with the requirements of the MS4 Permit.

Background:

Roads present many opportunities for green infrastructure application. One principle of green infrastructure involves reducing and treating stormwater close to its source. Urban transportation right-of-ways integrated with green techniques are often called “green streets.” Green streets provide source controls for stormwater runoff and pollutant loads. In addition, green infrastructure approaches complement street facility upgrades, street aesthetic improvements, and urban tree canopy efforts that also make use of the right-of-way and allow it to achieve multiple goals and benefits. Using the right-of-way for treatment of stormwater runoff links green with grey infrastructure by making use of the engineered conveyance of roads and providing connections to conveyance systems when needed.

Green streets are beneficial for new road construction and retrofits. They can provide substantial economic benefits when used in transportation applications. Coordinating green infrastructure installation with broader transportation improvements can reduce the cost of stormwater management by including it within larger infrastructure improvements. A large municipal concern regarding green infrastructure use is maintenance access; using roads and right-of-ways as locations for green

infrastructure not only addresses a significant pollutant source, but also alleviates access and maintenance concerns by using public space. Also, right-of-way installations allow for easy public maintenance.

Green streets can incorporate a wide variety of design elements including street trees, permeable pavements, bioretention, and swales. Although the design and appearance of green streets will vary, the functional goals are the same; provide source control of stormwater, limit its transport and pollutant conveyance to the collection system, restore pre-development hydrology to the maximum extent practicable, and provide environmentally enhanced roads. Successful application of green techniques will encourage soil and vegetation contact and infiltration and retention of stormwater.

Analysis:

- A. The City Engineer’s Office shall require projects which fall into the following categories to follow the
 - 1. Street and road construction of 10,000 square feet or more of impervious surface area.

Recommendation:

Adopt Green Streets Policy and corresponding Manual – County of Los Angeles Manual:

A copy of the completed County of Los Angeles Manual to be used by the property owner and/or developer.

Approved:

William Rawlings
Interim City Manager