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### **REPORT TO COUNCIL**

#### **SUBJECT**

Award of Contract for Storm Drain Trash Capture Devices (F17-119)

#### **REPORT IN BRIEF**

Council approval is requested to award a contract to Storm Water Inspection & Maintenance Services Inc., dba Storm Tek, of Discovery Bay in the amount of \$182,810 to install Connector Pipe Screens to capture trash in stormwater catch basins in accordance with San Francisco Regional Water Quality Control Board regulations. Approval is also requested for a 10% contract contingency in the amount of \$18,281.

#### **EXISTING POLICY**

Consistent with the provision of Sunnyvale Municipal Code Section 2.08.070(b)(3), contracts for the procurement of goods and services may be exempted from the competitive bidding process if the solicitation of bids or proposals would be impractical. In this instance, as the City standardized on connector pipe screens (ST3G devices) through a pilot project initiated by the Santa Clara Valley Urban Runoff Pollution Prevention Program in 2007, and a subsequent installation in 2011 it is important to continue to install ST3G devices of a similar design, material type, and function to enable City maintenance crews to apply a single protocol when servicing the devices. Consequently, the award of this contract is exempt from the competitive bidding process as it would be impractical from a maintenance viewpoint to install other types of devices.

#### **ENVIRONMENTAL REVIEW**

The California Environmental Quality Act (CEQA) determination for this project is a categorical exemption pursuant to Class 8, Section 15308 of the CEQA Guidelines for actions authorized by state or local law to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for the protection of the environment.

#### **BACKGROUND AND DISCUSSION**

Sunnyvale and 75 other Bay Area municipalities were issued a new Municipal Regional Stormwater Permit in November 2015, which became effective January 1, 2016. Issued by the San Francisco Regional Water Quality Control Board, the new permit continues many of the previous requirements to prevent stormwater pollution along with new requirements, including more aggressive trash reduction targets, implementation of new activities to control targeted pollutants such as mercury and PCBs, and the development of a stormwater green infrastructure plan.

The Stormwater Permit requires the City to achieve increasingly aggressive reductions in the amount of trash flowing through the City's storm drain system and into local waterways. Specifically, the next required reductions are 70 percent below 2009 levels by July 1, 2017 and 80 percent by July 1, 2019. On January 28, 2014, the City Council approved Sunnyvale's Long Term Trash Reduction Plan,

which describes the programmatic actions and infrastructure based controls the City would utilize to meet the Permit's required trash load reductions. The City's implementation efforts over the past decade has resulted in a 61.7 percent reduction as of July 1, 2016, compliant with the Permit's requirements.

The infrastructure based controls involve the installation of "full trash capture" devices, which must be certified by the San Francisco Bay Regional Water Quality Control Board. These devices include storm inlet connector pipe screens (devices installed in individual storm drain inlets) and large hydrodynamic separators.

Connector pipe screens are installed in individual storm catch basins to capture trash as it enters the catch basin and prevent the trash from flowing through the storm drain system into local receiving waters. These devices treat on average 1.5 acres of land areas depending on the location. To meet the 2017 requirement, in addition to other actions, the City must install an additional 120 connector pipe screens in the targeted areas by June 30, 2017.

To date, Sunnyvale has 78 connector pipe screens installed. These screens were procured through two separate efforts. In 2007, through a pilot project initiated by the Santa Clara Valley Urban Runoff Pollution Prevention Program, 13 connector pipe screens were installed in Sunnyvale with additional units installed in San Jose. At that time, the cities selected the StormTek ST3-G inlet screen as it was the only certified trash capture device. In 2011, 65 additional StormTek connector pipe screens were installed through an American Recovery and Reinvestment Act (ARRA)-funded grant administered by the Association of Bay Area Governments.

The StormTek devices have been certified by the Los Angeles Regional Water Quality Control Board and the San Francisco Bay Regional Water Quality Control Board as to their ability to capture trash as small as 5mm in diameter while having the design capacity to effectively treat for trash in a one-year, one hour storm event. Research by program partners has confirmed that the StormTek ST3 devices were manufactured with additional structural reinforcements that were lacking in other designs. Another feature unique to these screens is their semi-circular shape. This design has proven to perform much better than competing square designs when subjected to the hydrological forces present within the storm sewer system.

The StormTek devices have proven to be highly effective, reliable, and customizable in meeting the requirements of the stormwater permit. Each device is fitted to a specific storm drain catch basin and its non-standardized dimensions. Over the past 10 years, devices installed in Sunnyvale have continued to perform effectively.

Additionally, it is important that future devices be of similar design, material type, and function. This will ensure that maintenance crews can apply a single protocol when servicing the devices. This applies to routine maintenance as well as during flood response. When responding to flooding incidents, having different types of connector pipe screens installed throughout the City could lead to equipment damage if there are devices of different design or materials, or an increase in response time because field crews would have to research what specific device was installed in a specific catch basin and apply different equipment to remove the devices to relieve flooding. The key to achieving greater efficiency in maintenance procedures is the standardization of trash control equipment, like the StormTek ST3.

For these reasons, it is recommended that the City continue to install StormTek connector pipe screens as one of the actions toward meeting the Stormwater Permit's Trash Reduction goals.

### **FISCAL IMPACT**

In 2015, the City completed construction and installation of three large full trash capture devices at two locations. These hydrodynamic separators are large scale construction projects and treat stormwater flows through a vortex chamber that separates trash from the stormwater. The two locations where hydrodynamic separators were constructed in 2015 treat more than 300 to and 700 acres of land area, respectively. The construction costs for these two three devices was \$1,376,100 which significantly exceeded the original engineer's estimate of \$724,295. The City's Long Term Trash Plan identified two additional areas for full trash capture control via large hydrodynamic separators; however, recent engineering and design estimates show the large trash capture project costs in the range of \$2.6 million to \$2.8 million, more than three times the initial estimated costs.

Given this significant cost increase, staff re-evaluated the capital and ongoing operations and maintenance costs for treating these same land areas with the ST3G inlet based small trash capture devices and determined that this approach would be more cost-effective when factoring in long-term operations and maintenance related costs avoided by standardizing on this product.

Funding for this contract is available in Project 829080 Storm System Trash Control Devices.

### **Funding Source**

This project is funded by the Wastewater Management Fund (Fund 465).

### **PUBLIC CONTACT**

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Senior Center, Community Center and Department of Public Safety; and by making the agenda and report available at the Sunnyvale Public Library, the Office of the City Clerk and on the City's website.

### **RECOMMENDATION**

1) Award an installation contract, in substantially the same format as Attachment 1 to the report in an amount of \$182,810 to Storm Water Inspection & Maintenance Services Inc., dba Storm Tek, and authorize the City Manager to execute the contract when all the necessary conditions have been met; and 2) approve a 10% contract contingency in the amount of \$18,281.

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Approved by: Deanna J. Santana, City Manager

### **ATTACHMENT**

1. Draft Installation Contract