



City of Emeryville

CALIFORNIA

MEMORANDUM

DATE: December 18, 2018
TO: Christine Daniel, City Manager
FROM: Andrew Clough, Public Works Director
SUBJECT: **Resolution Of The City Council Of The City Of Emeryville Authorizing The City Manager To Enter Into A Contract With Schaaf And Wheeler In An Amount Not To Exceed \$88,528.00 For The Design Of A Large Trash Separator In Storm Drain Line, Fiscal Year 2018/19, Project No. EPW 107-18, CIP No. ST-13; CEQA Determination: Exempt Pursuant To State CEQA Guidelines 15061(b)(3) And 15063**

RECOMMENDATION

Staff recommends that the City Council adopt the above referenced resolution authorizing the City Manager to enter into a contract with Schaaf and Wheeler for the design of a large trash separator in the City storm drain system, Project No. EPW 107-18, CIP No. ST-13.

BACKGROUND

The City of Emeryville's Municipal Regional Stormwater Permit (MRP) administered by the San Francisco Regional Water Quality Control Board (Regional Board), requires that we reduce the amount of trash entering the San Francisco Bay through our municipal storm drain system. The Regional Board's reduction formulas show that Emeryville is currently at a 71% trash/litter reduction from pre-MRP levels; future targets include an 80% reduction by July 1, 2019 and an expected requirement of 100% reduction, or no visual impact, by 2022.

The City has developed a Long-Term Trash Reduction Plan that identifies and ranks trash generating areas of the City and specifies actions to be implemented to address specific areas. In areas with moderate-to-high trash generation, the plan calls for installation of trash recovery units in the stormwater system for full trash capture, which is the Regional Board's preferred method of trash reduction. Full trash capture can be done in two main ways: with connector trash screens in individual inlets, and with larger, subterranean "hydrodynamic separator" (HDS) devices at strategic points in the stormwater system to capture trash from broader areas of the city. This project, to design an HDS system to capture stormwater from the City's highest trash generation zones, will help the City reach its targets. These zones, which are based on guidance from the Regional Board and take into account land use and visual assessments, have been defined by EOA Inc., an environmental engineering firm, and were last updated in 2016 (See Exhibit A).

The installation of this HDS unit is an essential step towards reaching the 80% trash reduction target by 2019. For this reason, we have set a goal of June 30th, 2019 for the

completion of this project. Schaaf and Wheeler expressed in their proposal that they are prepared to meet that target.

DISCUSSION

The aim of this project is to prepare designs and specifications for the installation of a hydrodynamic separator in the storm sewer system of the City. HDS units are stormwater management devices that use cyclonic separation to control pollution in stormwater. They are designed as flow-through structures with a settling or separation unit to remove trash, sediment, and other pollutants. An HDS unit boasts excellent pollutant removal and retention and eliminates the need for numerous additional structures.

HDS systems are very low maintenance. Various studies have shown that while HDS units have a relatively high initial cost, their low maintenance means that over time they are better investments than connector trash screens, which are simple and inexpensive to install, but clog easily. Connector screens must be cleaned after every storm event, and even more often during the fall. Installing an HDS unit offers an effective way to maintain compliance with our MRP without overloading our operations crews.

The precise location of the HDS has not been determined yet. A general area has been selected for the unit within the drainage area that we aim to capture and treat. The proposed areas are shown in Exhibit B. Schaaf and Wheeler will work with its subcontractors to locate a suitable site that will avoid public utilities while maximizing the drainage area that the device will treat.

ENVIRONMENTAL REVIEW

This project is exempt from CEQA pursuant to state CEQA Guidelines 15061(b)(3) and 15063 because the project is a minor modification to existing infrastructure, with the purpose of protecting the existing environment.

FISCAL IMPACT

The design of the large trash capture system will cost \$88,528.00. The funds appropriated for the Large Trash Separator in Storm Drain Line, CIP No. ST-13 total \$530,000. Based on discussions with Schaaf and Wheeler, other engineering firms, and HDS suppliers, staff has determined that allocating \$88,528.00 for design will leave enough funds to cover the price of the HDS unit and its installation.

Additionally, staff have been in contact with Caltrans in an effort to secure funds that would repay the City for some or all of the costs associated with the installation of the HDS unit. Caltrans is subject to a similar MRP as Emeryville and also needs trash capture credit in order to stay in compliance with the San Francisco Bay Regional Water Quality Control Board. They have a program through which they refund municipalities for building stormwater treatment facilities that treat stormwater running off Caltrans right of way. Our project will treat Caltrans right of way on San Pablo Avenue, a high trash generating area. We are currently awaiting updates on the status of our application for these funds.

STAFF COMMUNICATION WITH THE PUBLIC

There have been no staff communications with the public as of this time, although the trash reduction requirement itself has been the subject of many public hearings at the Regional Board.

CONCLUSION

The City must capture trash entering our storm drain system as mandated by the MRP. In order to reach the required 80% trash capture level by 2019, the City must take action. Public Works staff has done its due diligence in researching various methods by which this can be achieved, and has concluded that installing a hydrodynamic separator in the City's storm drain system is a long term, cost effective solution to this problem and will guarantee that the stormwater being released into our tidal shores is free of trash and debris, and that the City maintains compliance with the requirements of the MRP.

Schaaf and Wheeler have designed many HDS systems for cities around the Bay Area and Public Works staff believes them to be the most qualified candidates for the job. Their proposal was the most complete and had the lowest cost of the three qualifying proposals received. Thus, staff recommends that the City Council adopt the attached resolution authorizing the City Manager to enter into a contract with Schaaf and Wheeler for the design of a large trash separator in our storm drain system, Project No. EPW 107-17, CIP No. ST-13.

PREPARED BY: Nancy Humphrey, Environmental Programs Supervisor
Oliver Abbitt, Environmental Programs Intern

**APPROVED AND FORWARDED TO THE
CITY COUNCIL OF THE CITY OF EMERYVILLE:**



Christine Daniel, City Manager

ATTACHMENTS

- Draft Resolution
- Signed Contract with Schaaf and Wheeler
- Exhibit A
- Exhibit B