

**CITY OF ALBANY
CITY COUNCIL AGENDA
STAFF REPORT**

Agenda date: May 2, 2011

Reviewed by: BP

SUBJECT: Agreement with URS Corporation to provide an engineering study for the replacement of existing sanitary sewer and storm drain pipe on Peralta Avenue.

FROM: Randy Leptien, City Engineer
Ana Bernardes, Project Manager
Rich Cunningham, Public Works Manager

RECOMMENDATION

Authorize the City Manager to enter into an agreement not to exceed \$29,640 with URS Corporation to prepare a study outlining alternatives for the replacement of the storm drain pipe located between 1004 and 1006 Peralta Ave. and a conflicting sanitary sewer in Peralta fronting these two residences.

BACKGROUND

During routine maintenance of the sewer main located between 1004 and 1006 Peralta Ave, the City crew discovered that the main storm drain pipe that runs parallel to the sewer line and it is located right underneath a portion of the building is reaching the end of its useful life. The City Engineer, upon conducting a survey and further investigation, discovered that the elevation of the sanitary sewer where it crosses the storm drain in Peralta Ave is in conflict. The sanitary sewer pipe actually flows through the storm drain at this location. The storm drain pipe in the easement is a relatively shallow pipe that runs between the buildings at 1004 and 1006 Peralta Ave. The sanitary sewer runs in this same 5 foot easement. The sewer was replaced in the early 1990s. The storm drain lies directly beneath the foundation of the residence at 1006 Peralta.

Due to the close proximity of the pipe to the building foundation, replacement by bursting the existing pipe, which is routinely being done throughout the City, may not be possible. The City engineer therefore recommends that an engineering consultant that specializes in trenchless pipeline installation design be retained to evaluate alternatives to repair or replace the storm drain pipe and to resolve the grade conflict with the sanitary sewer in the street. The subject project is located just two blocks upstream (northeast) of the north end of the Neilson St. storm drain that was constructed in 2009. URS Corporation provided engineering studies and design for this project. The City Engineer finds this firm to be uniquely qualified for this project and has therefore requested a proposal from them only to provide the requested services. Elmar Kapfer, the principal engineer for URS who is in charge of the study is an Albany resident.

Associated Right of Way Services, a consulting right of way firm that has assisted the City in the past with sewers and storm drains in back and side yard easements has been retained separately to assist with initial discussions with property owners concerning a proposed project at this location.

DISCUSSION

As proposed, URS will perform a preliminary geotechnical engineering investigation to determine the soil conditions in the easement. They will next consider alternatives for replacing or rehabilitating the pipes in question. These will include open trenching, pipe bursting, horizontal directional drilling, micro

tunneling plastic pipe liners and cured in place (fiberglass) pipe technologies. URS will also conduct a hydrologic and hydraulic analysis to determine the storm water quantity flowing through the pipe and the pipe capacity. The hydraulic analysis will determine whether or not the diameter of the storm drain may be reduced in order to allow the City to simply insert a plastic or fiberglass liner in the existing pipe. URS will prepare a report outlining the various alternatives and the estimated costs and risks associated with each. Once a chosen alternative to repair the line is selected, URS will develop a second proposal for the preparation of construction documents and support services during construction.

URS Corp has executed the City's Standard form of agreement and the agreement has been reviewed by the City Attorney.

SUSTAINABILITY IMPACT

The project will eliminate a possible "cross connection" from the storm drain into the sanitary sewer system which could reduce associated pumping costs at EBMUD. Were a cross connection to occur, the City would expend significant energy in responding to the potential sanitary sewer overflow that would result from the introduction of storm waters to the sanitary sewer system.

FINANCIAL IMPACT

Measure F-2006 will provide funding for this study. Approximately \$100,000 per year of Measure F-2006 funding is reserved in the CIP is reserved for miscellaneous storm drainage repair projects such as this project.

Attachment: Proposal from URS Corp