DATE: February 21, 2013

TO: BOARD OF PUBLIC UTILITIES

FROM: JESÚS McKEAG, ASSISTANT ENGINEER

SUBJECT: CONSTRUCTION CONTRACT CONTINGENCY INCREASE –

MONTGOMERY DRIVE - TALBOT TO FARMERS AND JEAN DRIVE SEWER AND WATER IMPROVEMENTS PROJECT

ACTION: MOTION

ISSUE:

Shall the Board of Public Utilities, by motion, authorize an increase in construction contingency in the amount of \$115,000.00 for a total contingency amount of \$449,497.90 for Montgomery Drive - Talbot to Farmers and Jean Drive Sewer and Water Improvements Project?

BACKGROUND:

On April 19, 2012, the Board of Public Utilities by motion approved the award of a construction contract in the total amount of \$2,229,986.00 to the lowest responsive bidder, Mountain Cascade, Inc. of Livermore, CA, for the Montgomery Drive – Talbot to Farmers and Jean Drive Sewer and Water Improvements Project, and authorized a contingency amount of 15% (\$334,497.90) Construction has been progressing continuously since the summer of 2012 and is slated for completion in spring of 2013.

Since the soil and groundwater in this area were anticipated to be contaminated, the City hired a consulting firm to conduct a Pre-Construction Hazardous Materials Assessment during the design phase of the Project. The assessment verified the presence of contamination in the groundwater and the likely need for treatment prior to discharging into the sanitary sewer. Groundwater samples were collected at the start of construction to determine if conditions had changed from the pre-construction state and to determine the size and type of treatment system required.

Based on the rate of treatment cost accrual during construction thus far, groundwater treatment costs are projected to exceed \$230,000 by the time construction is completed in the coming months. If the contingency increase recommendation described herein is approved, the total contingency amount would be 20.16% of the construction contract and uncommitted contingency amount of approximately \$80,000 will remain available for unforeseeable issues other than groundwater treatment during the balance of construction.

ANALYSIS:

A Geotechnical Report was conducted for the Project due to the depths of the proposed sanitary sewer. The report findings indicated sections of soil layers with high permeability (hydraulic conductivity), which was considered during design.

Nonetheless, the volume of groundwater being pumped during construction has still been significantly higher than anticipated during design, which in turn has resulted in a larger volume of groundwater to be treated than was also anticipated during design. Due to the fact that the volume of groundwater requiring treatment and the treatment system configuration could not be adequately quantified prior to construction (and therefore not be estimated by a bidder), the contract documents include provisions to pay for the treatment system by force account. Due to the unforeseen magnitude of groundwater, the final costs for the treatment system resulted in roughly twice what was anticipated.

The construction manager for the Project has reviewed documentation describing costs for the groundwater treatment and has verified their accuracy. The requested contingency increase will address approximately half of the final groundwater treatment costs.

RECOMMENDATION:

Engineering Services recommends that the Board, by motion, authorize an increase in construction contingency in the amount of \$115,000 for a total contingency amount of \$449,497.90 for Montgomery Drive - Talbot to Farmers and Jean Drive Sewer and Water Improvements Project.