



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Katy Allen

**SUBJECT: 84-INCH RCP INTERCEPTOR
REHABILITATION PHASE
VIB PROJECT**

DATE: 02-12-07

Approved

Date

2/15/07

COUNCIL DISTRICTS: 3 & 4

RECOMMENDATION

Approval of Contract Change Order No. 5 for the 84-Inch Reinforced Concrete Pipe Interceptor Rehabilitation Phase VIB project with Ebert/McGuire Hester in the amount of \$185,674 for a total contract amount of \$4,364,428.17 and an extension of 48 working days for a total of 278 working days.

OUTCOME

Contract Change Order (CCO) No. 5 will compensate the contractor for all costs associated with repair of any slip-liner pipe joints which are overlapped by 3-inches or less.

The completion of the project ensures that the primary sanitary interceptor has been rehabilitated to extend the service live of the sewer and to ensure adequate, reliable capacity.

BACKGROUND

In 1986, the City completed a master plan and design study of the City's major interceptor system. The study provided recommendations to rehabilitate and/or replace the existing major interceptors in order to accommodate additional flows from the ultimate build-out of the urban service area. The rehabilitation and replacement projects were divided into multiple phases in order to implement construction effectively, and to provide for a new Fourth Major Interceptor.

The 84-inch RCP Interceptor Rehabilitation Phase VIB Project is one of the projects identified from the above study to be rehabilitated. It is located on Fourth Street between Highway 101 and Burton Street. A condition assessment study and a remote video inspection identified moderate to severe corrosion in these segments of the interceptor. The study recommended rehabilitation of the interceptor to restore the structural integrity and serviceability of the sewer. The method of rehabilitation (slip-lining) consists of inserting segments of fiberglass pipe of slightly smaller diameter into the existing RCP host pipe. The space between the slip-liner and

the host pipe will then be grouted to anchor the slip-liner in place. This rehabilitation method was chosen because of the minimal sewage by-pass required during the slip-lining process.

On June 28, 2005 Council awarded the construction contract to Ebert/McGuire Hester, in the amount of \$4,089,897. Due to the unknown condition of the existing reinforced concrete pipe (RCP) staff recommended and Council approved a 15% contingency in the amount of \$615,000. To date, a total of four contract change orders have been executed in the total amount of \$88,857.17, and six working days have been added to the original contract. The unexpended contingency balance for the project is \$526,142.83.

Construction started in October 2005 with completion scheduled in March 2007.

ANALYSIS

Contract Change Order No. 5 is intended to compensate the Contractor for repair of any slip-liner pipe joints which are overlapped by 3-inches or less.

The standard procedure for installation of the fiberglass slip-liner is to overlap each segment of slip-liner pipe by 5-inches. During installation of the slip-liner pipe into the host pipe it was found that a significant number of the slip-liner joints were not overlapped by the manufacturer's minimum requirement of 4.3 inches. It was determined that the slip-liner pipes could not be properly overlapped due to slight misalignments in the host pipe. These misalignments could not be detected by any of the pre-slip-lining inspections required by the contract, including internal video inspection, pulling of a test section through the entire length of the host pipe and man entry measurements. Subsequent pressure testing of the slip-liner pipe joints at the overlap indicated that the joints both within and outside the manufacturer's recommendation would not be able to withstand the pressures anticipated during the grouting operation.

Through negotiations, the pipe manufacturer has agreed to compensate the Contractor for repair of any slip-liner joints which the overlap is greater than 3-inches. This is equivalent to approximately 54% of the total cost to repair all the joints. Therefore, this change order compensates the Contractor solely for repair of joints with an overlap of 3-inches or less.

POLICY ALTERNATIVES

Not applicable.

PUBLIC OUTREACH/INTEREST



Criteria 1: Requires Council action on the use of public funds equal to \$1 million or greater; **(Required: Website Posting)**

- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

While this action does not meet the \$1 million threshold for Criteria 1, this memorandum will be posted on the City's websites for the March 6, 2007 Council agenda. This project was listed on the City's Internet Bid Line and advertised in the *San José Post Record*. Bid packages for all Department of Public Works construction projects are provided to various contractor organizations and builder's exchanges.

COORDINATION

This project has been coordinated with the Departments of Planning, Building and Code Enforcement, Transportation, Finance, and the City Attorney's Office.

FISCAL/POLICY ALIGNMENT

This project is consistent with the Council-approved Budget Strategy Economic Recovery section in that it will spur construction spending in our local economy.

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: \$185,674

2. COST ELEMENTS OF THIS PROJECT:

Project Delivery	\$1,022,000.00
Construction	4,089,897.00
Previous Contract Change Orders (Nos. 1 to 4)	88,857.17
Contract Change Order No. 5	185,674.00
Remaining Contingency	340,468.83
TOTAL PROJECT COSTS	\$5,726,897.00
Prior Year Expenditures	(1,078,814.00)
REMAINING PROJECT COSTS	\$4,648,083.00

To date, four change orders totaling \$88,857.17 have been issued for this project. The Contingency Reserve of \$615,000 has been sufficient to cover the costs of these change orders.

3. SOURCE OF FUNDING: 545 – Sewer Service and Use Charge Capital Improvement Fund
4. OPERATING COSTS: The proposed operating and maintenance costs of this project have been reviewed and it has been determined that the project will have no significant adverse impact on the General Fund operating budget.

BUDGET REFERENCE

Fund #	Appn #	Appn Name	RC #	Total Appn	Amt for CCO #5	2006-2007 Adopted Budget (Page)	Last Budget Action (Date, Ord. No.)
Remaining Project Costs*				\$4,648,083			
Current Funding Available							
545	4695	84" RCP Interceptor Phases VB, VIB, VII & VIIA	135485	\$4,287,000	\$185,674	Capital V-65	10/17/06, Ord. No. 27888
Total Current Funding Available				\$4,287,000			
Total Funding for Remaining Project Costs				\$4,287,000			

*4,089,897 construction contract for the 84-inch RCP Interceptor Rehabilitation, Phase VIB project was already encumbered in fiscal year 2004-2005. The construction contract encumbrance balance of \$3,374,420 has been carried over to FY 06-07.

CEQA

CEQA: Exempt, PP 02-05-114.

Katy Allen

KATY ALLEN
Director, Public Works Department

For questions please contact TIMM BORDEN, DEPUTY DIRECTOR, at 535-8300.