

**SUBJECT: Change Orders and Contract Amendments for CIP Projects.** Presented to Council

Date: 10/22/01

PREPARED BY: Public Works

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FOR AGENDA OF: October 22, 2001

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**SUMMARY:** The Administration is seeking to provide all the necessary information to council members when considering change orders and contract amendments for council approval. The following discussion is intended to provide the policies and practices used by City staff when evaluating change orders and contract amendments.

**DISCUSSION:** The administration recognizes that change orders and contract amendments are routinely used during construction projects. These actions are intended to provide fair compensation for work rendered by contractors and consultants. There are a variety of reasons change orders and contract amendments are needed.

The most common reason for change orders and contract amendments is when field conditions vary from that anticipated by the design engineer, causing the pay item quantities to vary from what was established in the bid documents. Variations in bid quantities (over-runs and under-runs) often offset each other and have a minimal effect on the contract price. Significant variations are closely scrutinized by City staff and the design engineer before being presented for council approval.

Unbalanced bids are sometimes used by contractors that result in an increase of the project cost. An unbalanced bid occurs when a contractor adjusts the actual cost of each pay item, such that the total cost of the project remains the same, but selected pay items have excessive profit built in. The contractor will decrease a pay item cost that is straight forward and not expected to have an increase in quantity, and increase a pay item cost that is not straight forward and expected to increase in quantity. The City recognizes this practice and reviews the apparent low bidder for unbalanced bid items. The City will reject an apparent low bidder, if it is determined that the bid is unbalanced and not in the City's best interest.

Another type of change order and contract amendment occurs during construction when it is determined that changes can be made within a project to provide for future CIP savings, such as when a bike path is added to a paving LID, or when a sight distance problem is corrected at an intersection while installing a water main, or when a project is expanded to serve an area beyond that originally designed. These decisions are usually made in the field when City staff recognize that an opportunity is available during construction to stretch the City dollar and gain additional improvements to infrastructure under an existing contract.

Another type of change order and contract amendment occurs when underground utilities are found during construction that are not anticipated by the design engineer. To avoid this, all utilities would need to be pot-holed and exposed in the design phase

to verify location. This type of work is cost prohibitive, especially when paved streets are involved. The net cost to the project remains the same, whether a conflict is corrected in the design, or the conflict is adjusted during construction.

Change orders and contract amendments usually do not exceed the CIP budget prepared by the administration and approved by council each year. The administration establishes CIP budgets that have contingencies to account for unforeseen costs. When a low bid is accepted, there is generally a contingency balance in the approved budget for change orders and contract amendments.

City staff use the following criteria to determine whether a change order or contract amendment is justified:

Is the change order or contract amendment an integral part of the project?

Is the change order or contract amendment needed to facilitate a future project or need?


Does the change order or contract amendment require additional funding, beyond that budgeted and approved in the CIP?

Many change orders and contract amendments can be eliminated by expending a greater percentage of the project budget in the design phase. However, this does not necessarily mean that the overall project cost is reduced. Change orders and contract amendments reflect the actual cost of doing business, while minimizing upfront design costs.

Projects would tend to cost more to the City if every possible conflict were identified upfront. To have the best possible information, geotechnical reports need to be greatly expanded to identify all possible soil conditions within a project area and every utility needs to be pot-holed to verify its location, all of which creates additional excavation costs to the total project. Savings are achieved when excavation costs are shifted from the design phase to the construction phase.

There are many change orders that are not presented to council, that eliminate or adjust portions of a project and reduce costs. Council does obtain a skewed view of construction projects, as it only sees the change orders and contract amendments that increase project costs. The City has awarded 18 construction and engineering contracts this year totaling \$3.9 million, and has approved 8 change orders totaling \$218,000, with 3 change orders on this agenda (\$131,000). This represents a 9% contingency factor, that falls within the 10-15% contingency factor used in the CIP budget. The administration invites council members to a work session with City staff to review City projects and provide input on project management.

**RECOMMENDED:** No Action Required.



Reviewed by: SARAH PALIN, Mayor