

<p>TO:</p> <p><b>MVS DOT RECEIVED</b>  <b>MAY 02 1994</b>  <b>HIGHWAY/RAIL &amp; UTILITIES DIVISION</b></p> <p><b>SUPERSEDED BY EB 96-027</b>  <b>EFFECTIVE 6/18/96</b></p>	<p align="center"><b>ENGINEERING INSTRUCTION</b></p> <p align="center">NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>
<p>Distribution:      30 Main Office    32 Regions    34 Consultants</p>	<p>SUBJECT:      <b>NEW, ALTERED OR ADDITIONAL WORK ON DEPARTMENT CONSTRUCTION CONTRACTS</b></p> <p>Subject Code: 7.27</p>
<p>APPROVED:</p> <p align="center"><i>P. T. Wells</i></p> <p align="center">P. T. Wells, Director, Construction Division</p>	<p>Code: <u>  EI 94-009  </u></p> <p>Date: <u>  4/12/94  </u></p> <p>Supersedes:</p>

Effective on 05/02/94, the attached procedures are to be used in considering payment for added, altered, or new work on Department construction contracts.

Attached are the following:

- **GUIDELINES FOR SIGNIFICANT CHANGE IN QUANTITIES OF WORK ITEMS (pages G-1 to G-3).**
- **BID PRICE ANALYSIS (pages BP-1 & BP-2).**
- **NEW PRICE ANALYSIS (pages PA-1, PA-2, & PA-3).**

These guidelines, procedures and worksheets are to be used as methods to analyze and document decisions relative to proper compensation for new or altered contract work. This information will be included in a revised Construction Supervision Manual.

Use of these guidelines and worksheets will provide uniform treatment of altered and additional work issues, and will serve to document item price decisions as required by Federal Highway regulations. Completed worksheets are to be retained in the project records. They are not to be incorporated into Orders-On-Contract, but should be attached to the Order package submitted to the Main Office as back-up material.

Questions regarding these changes should be addressed to the Construction Division at 457-6475.

## GUIDELINES FOR SIGNIFICANT CHANGE IN QUANTITIES OF WORK ITEMS

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Construction Program Policy emphasizes open and timely communication with our contractors, as well as prompt payment for completed work. To achieve these, it is necessary to inform contractors of changes in work quantities as we become aware of these changes, and to process Orders-On-Contract to allow for payment of the altered quantities.

The contract provisions allow either the Department or the contractor to request a change in unit price if a significant change occurs in the quantity of a major item. Any change in the unit price should be a reflection of change in the cost of performing the altered quantity of work. Responsibility to notify the other party of a request for a price change rests individually with each party, and such a request is to be made within 10 days of knowledge of the change in quantity.

It is important that we inform contractors of known changes in quantities in a timely manner. By sharing this information, we provide the contractor an opportunity to assess the impact of the changed quantity on his costs, and to make a timely decision regarding any changes in unit price. Such communications with the contractor should occur through normal project level communications (job progress meetings and review of payment estimates), and should be documented. The following guidance is provided to assist EIC's in determining if a significant change in quantity should be the basis of a price change in favor of the Department.

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- I. Whenever it is determined that the quantity of a work item will (or did) increase or decrease by more than 25%, two questions are to be answered:
    1. Is the item a major item of work?
    2. Is the contract unit bid price reasonable compensation for the altered quantity of work?

If the work is not a major item, the major item provisions of Section 109-16 do not apply, and payments shall be made at unit bid prices, as limited by Section 109-05A. If the work is a major item, a bid price analysis shall be performed.

For all significant changes in quantity, the EIC needs to consider if the change in quantity results from, or causes a change in the character or method of work operations. Such changes in character or method of operations are a basis for requiring a new price analysis. For any consideration of unit prices, the EIC may elect to use the same analysis as is indicated below for major items.

- II. In cases of Significant Change in the quantity of a Major Item, the affected work is considered to be new contract work for which the unit bid price may or may not be appropriate compensation. Both contract parties have the opportunity to review the unit bid price and request an adjustment. The Department's determination regarding acceptability of the unit bid price shall be based on a Bid Price Analysis.

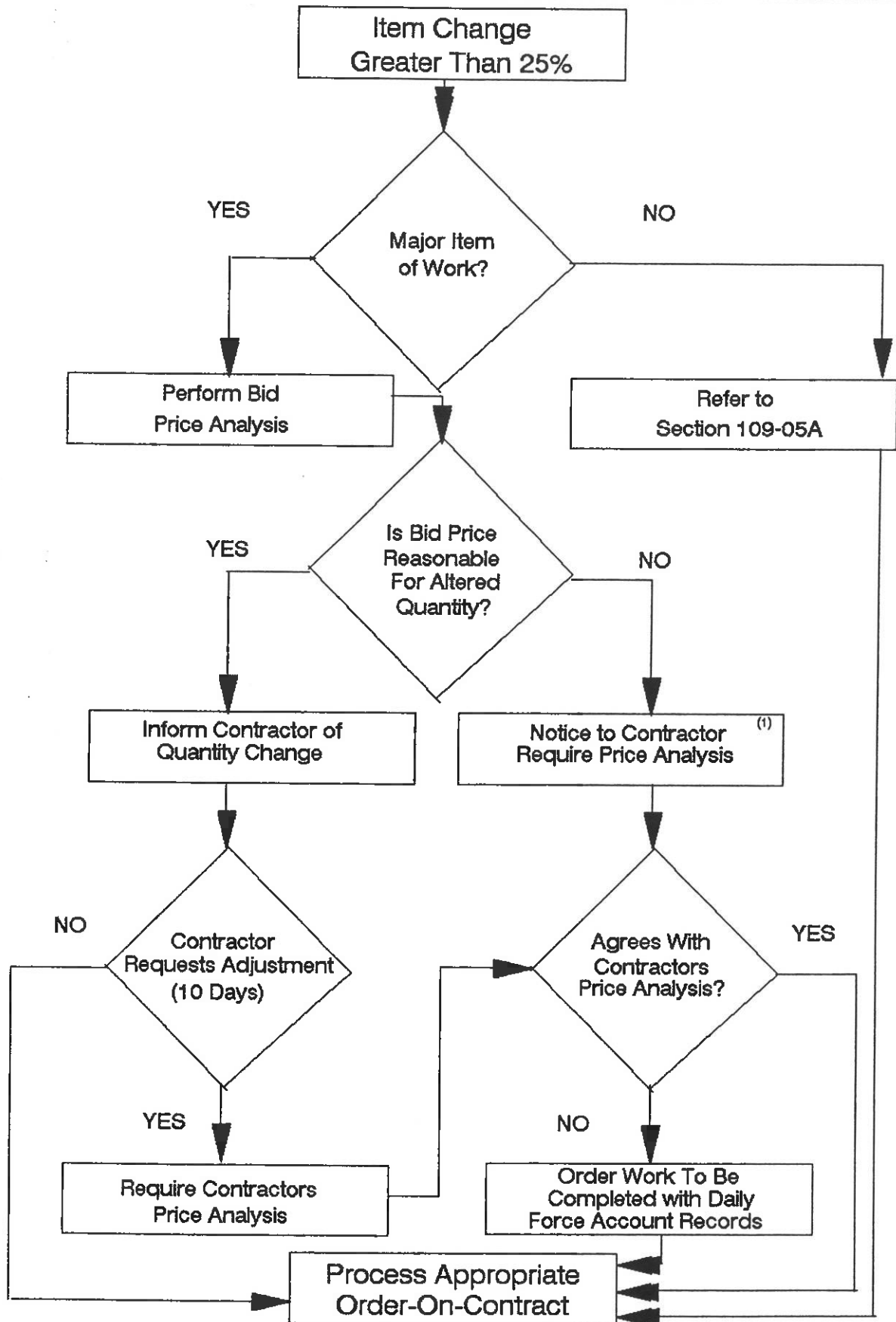
**Possible Outcomes of BID PRICE ANALYSIS:**

- A. Bid prices analysis indicates that the contract unit bid price is reasonable for the altered work:
1. The EIC shall inform the contractor of the change through regular job communication.
  2. If the contractor does not request an adjustment an OOC shall be processed for the altered work at the contract unit price (Ref. Section 109-16(3) (vii)).
  3. Should the contractor request an adjustment to the contract, he shall be required to submit a price analysis in support of his position and that should be reviewed by the EIC.
- B. Bid price analysis indicates that the contract unit bid price may not be reasonable for the altered work, and an adjustment in favor of the State is requested.
1. The EIC shall indicate such in a letter to the contractor.
  2. A new price analysis shall be required, and reviewed by the EIC.
- III. If the Department and the contractor cannot agree on a price prior to performance of the work, the work shall be considered to be Disputed Work, and, Force Account Records kept in accordance with Section 109-05C.

In these situations, progress payments for the work shall be made at a rate determined by the Department as reasonable. For increases, this will require submission of an Order-On-Contract.

**(NOTE: For increases in Major Items, adjustment is limited to that work which exceeds 125% of the original contract amount. For decreases greater than 25%, adjustment may be made to the total actual quantity.)**

# GUIDELINES FOR SIGNIFICANT CHANGE IN QUANTITIES OF WORK ITEMS



(1) Beginning with the time of notice, and through agreement, any affected work shall be documented by Daily Force Account procedures

## **BID PRICE ANALYSIS**

A bid price analysis shall be completed to determine if a contract unit bid price is reasonable compensation for work which has been altered by significant changes in quantity.

A bid price analysis involves comparing the contract unit bid price to:

- the Design Engineer's Estimated Unit Price, and
- the Weighted Average Bid Price for similar types of work.

It also considers:

- project conditions which justify price variations.

In Section IV - Project Conditions, of the attached worksheet, consideration can be given to conditions or requirements which cause the project bid price to vary from either the Design Engineer's Estimate price or the Statewide Average Bid Price for work under the item. This section may include reference to other project bidders prices, actual costs (based on work to date), or independent cost estimates based on labor materials and equipment.

With the above information, the Engineer can make a reasonable judgement regarding the use of the contract unit bid price for altered quantities of work.

The attached Bid Price Analysis Worksheet provides a format for this analysis. The information required is available in records sent to the Region with the contract award. If any section of the worksheet does not apply, go on to the next section.

The original copy of the completed worksheet shall be kept with the project records. A copy shall be submitted with the Order-On-Contract package as back-up for price determinations, but shall not be a part of the Order-On-Contract.

# BID PRICE ANALYSIS WORKSHEET

## SECTION I - ITEM INFORMATION

Item \_\_\_\_\_ Major Item Yes No  
Unit Bid Price \_\_\_\_\_ Original Quantity \_\_\_\_\_  
Estimated Revised Quantity \_\_\_\_\_ % Change \_\_\_\_\_

## SECTION II - ESTIMATED COSTS

- Engineer's Estimated Unit Price \_\_\_\_\_
- Is Unit Bid Price Within 25% of Engineer's Estimated Unit Cost Yes No
  - If Yes, End Analysis, Go to Section V
  - If No, Go to Section III

## SECTION III - WEIGHTED AVERAGE BID PRICES

- Weighted Average Bid Price for Item \_\_\_\_\_  
Regional \_\_\_\_\_ Statewide \_\_\_\_\_
- Is Unit Bid Price in Average Bid Range? Yes No
  - If Yes, End Analysis, Go to Section V
  - If No, Go to Section IV

## SECTION IV - PROJECT CONDITIONS

- Explain or Document Variations Between the Unit Bid Price and the Engineer's Estimated Price:

## SECTION V - BID PRICE JUDGEMENT

- Is the altered work substantially the same as the work bid upon? Yes No
- Is the Contract Unit Bid Price Reasonable Payment for the Altered Quantity of Work? Yes No

Analysis By: \_\_\_\_\_

Date \_\_\_\_\_

## NEW PRICE ANALYSIS

New price analysis are required when:

- New types of work are added to the contract, or
- A determination of significant change results in the unit bid price no longer being reasonable compensation.

The essential concepts to bear in mind while negotiating new prices are:

- Cooperative negotiations and early resolution of compensation issues are a benefit in avoiding disputed work and delays to project completion.
- The contractor is entitled to fair and timely compensation, including reasonable profit.
- The Department is entitled to a fair value for the price to be paid.
- The competitive bidding process provides reasonable average prices for a variety of work items, in normal situations.
- Most work is essential to project completion, but some work may be optional.

## PROCEDURE:

1. Obtain a price quote from the contractor.
  - A. If the unit bid quote is comparable to weighted average bid prices for similar type and quantity of work in recent contracts, then no back-up is required.
  - B. Otherwise, the contractors price quote must include a work-up which is:
    - Based on estimated labor, materials and equipment.
    - In a format similar to force account submissions  
(Ref: 109-05 B2.)
2. Compare price quote to Weighted Average Bid Prices. If the work is similar to that which has been recently bid on other projects, and the price quote is in the range of the Weighted Average bids, then the price is to be accepted. If the work or the quote does not compare well to Weighted Average Bid prices, then a detailed review of the contractors price work-up is to be made.

3. Analyze the Price Work-Up.

- Is the estimated labor, materials and equipment reasonable for the anticipated work?
- Are the work-up production rates for labor and equipment reasonable?
- Check rates for:
  - Labor and Labor Additives
  - Materials Cost (Quotations?)
  - Equipment Costs or Rates (Rental quotes, and Blue Book).
- Is mark-up for overhead and profit reasonable?
- Check math.

4. Desired price changes resultant from the above reviews are to be discussed with the contractor. Resubmission of price quotes and/or detailed price work-ups may be part of this process.
5. If agreement cannot be reached on a price; it must be determined if the work is essential, or if it can be deleted from the project. If the work is essential, then it should be ordered to be completed under Force Account procedure.
6. Process a written Order-On-Contract as soon as possible. In certain cases, Department specifications and procedures allow ordered work to commence prior to approval of a written Order-On-Contract. However, payments to the contractor cannot be made until the OOC is filed by the Office of the State Comptroller.

