



To:  <b>SUPERSEDED</b> <sup>BY</sup> <i>EI 02-034</i> <i>EFFECTIVE 5/8/03</i>		New York State Department of Transportation <b>ENGINEERING          INSTRUCTION</b>	<b>EI</b>  <b>02-023</b>
<b>Title: DESIGN GUIDANCE - FIELD CHANGE ORDER</b>			
Distribution: <input type="checkbox"/> Manufacturers (18) <input type="checkbox"/> Surveyors (33) <input checked="" type="checkbox"/> Main Office (30) <input checked="" type="checkbox"/> Consultants (34) <input checked="" type="checkbox"/> Local Govt. (31) <input checked="" type="checkbox"/> Contractors (39) <input checked="" type="checkbox"/> Regions/Agencies (32) <input type="checkbox"/> _____ ( )	Approved:  _____ James F. Tynan, Director, Construction Division <span style="float: right;"> <u>8/5/02</u>          Date       </span>		

**ADMINISTRATIVE INFORMATION:**

- This Engineering Instruction (EI) is effective with projects submitted for the letting of 11/07/02.
- This EI supersedes Highway Design Manual Chapter 21, Section 21.3.8.4, Section 697 - Interim Payments dated 10/23/00.
- The design guidance issued in this EI will be incorporated into Chapter 21 with the next revision to the Highway Design Manual.

**PURPOSE:**

The purpose of this EI is to issue new guidance regarding the specification and estimation of Standard Specification Item 697.02 Field Change Order (FCO).

**TECHNICAL INFORMATION:**

- The Field Change Order contract pay item is not required for locally let projects, however localities may opt to use a similar contingency mechanism to provide prompt payment to contractors.
- The Standard Specification is being issued concurrently under EI 02-024, contract administration guidance under EB 02-043, and construction inspection guidance under EB 02-044.
- The revised and renamed Section 697 introduces *Item 697.02, Field Change Order (FCO)*, that replaces the Interim Payment Item. The Field Change Order will provide construction contracts with a source of funds more consistent with the overall value of the contract. This will allow for more efficient and timely processing of contractor payments.

**BACKGROUND:**

In July of 2000, the Commissioner tasked the Construction Division and the Office of Budget and Finance with developing lasting solutions for the persistent problem of delayed payments to contractors. The joint study analyzed the entire process from when work is identified on a project through when the contractor receives payment for the work. Particular attention was paid to Orders-on-Contract (OOC).

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The Department's contract accounting system for construction contracts limits payments to specific work items and quantities in the original contract. Any contract alteration, even as simple as an existing quantity over-run, requires the processing of a formal OOC before payments can be made to the Contractor. In an effort to alleviate payment delays, Interim Payments, Item 697.01 was developed. Currently, the Interim Payment Item allows the Department to make payments to the Contractor for additional work which had not yet been added to the contract by OOC. Once an OOC is processed for the additional work, the amount paid from Item 697.01 is returned, and the funds are available to be reused for other payment items.

The shortfall of the existing Item 697.01 is the relatively small amount of funding allocated to the item. The allocated amount is dependant on the contract size, but is capped at \$250,000. On larger contracts, these funds can be quickly expended on one or two new or increased items in the early stages of the contract, with long delays before the funds can be replenished via the formal OOC process.

The joint study has recommended the implementation of the Field Change Order (FCO) as a streamlined process that will provide for timely payments for (a) simple changes in quantities of existing contract items, or (b) new items that are within the scope of the project for which an agreed price can be determined. This process is commonly used by other state agencies and the Office of the Comptroller has strongly encouraged the Department to also utilize it. The FCO requires an encumbrance in the initial contract, similar to a "contingencies" line, which is utilized as minor changes occur. The amount of the funds available in Item 697.02, Field Change Order is determined using a sliding scale based on the engineer's estimated contract amount, with a cap of \$3,500,000. The funding level should be sufficient to meet the typical amount of adjustments that will accrue over the lifetime of a construction contract. The payments for eligible work under a FCO will be paid with progress payments and will not require an OOC. Once the project is completed, a final accounting of costs requires that the FCO line be eliminated by shifting costs via OOC to specific pay items in the contract. Any unused portions of the encumbered contract (in any line, including the one for FCOs) will also be unencumbered at that time. As with the existing process, funds released from project closeouts will then become available again to support the regional construction program.

The study team has taken into consideration that this item will add to the estimated construction costs and result in higher project lettings. Eliminating the Interim Payment item and including the FCO item will result in a fairly consistent cost increase of approximately 3% per region and statewide. This would primarily impact the capital program of the initial year of using FCOs, however, given all the factors that come into play during a year of project lettings, we believe the impact will be indistinguishable. In addition, the reductions in OOCs, as a result of the FCO, should further offset the letting increases in subsequent years. The number of OOCs being processed is expected to drop by 50% - 65%. This reduction in the required processing of OOCs will create a significant time savings for Construction Division personnel, but it will especially benefit the Office of Budget and Finance and the Office of the State Comptroller as they currently expend a significant effort with the processing of an OOC.

The FCO process has been carefully reviewed and approved by the Offices of Operations, Budget and Finance, the Program Management Division, and all Regional Directors. The Executive Policy Committee approved the implementation of the FCO effective 1/29/02.

### CONTACT:

Direct questions regarding this El to Brian DeWald of the Construction Division at (518) 457-6472 or via e-mail at [BDeWald@gw.dot.state.ny.us](mailto:BDeWald@gw.dot.state.ny.us).

Section 697 - Field Change Order

A. Applicability

Pay Item 697.02 - Field Change Order shall be specified consistent with the applicability criteria provided in Table 1.

**Table 1 Applicability Criteria**

Applicability Criteria	Not Required/Required
Projects for which there is little or no opportunity for use regardless of cost (e.g., single-payment contracts such as simplified pavement preventive maintenance contracts*, force account-based contracts, etc.) and projects with an Engineer's Estimate less than \$100,000.	Allowed, but Not Required
All projects with an Engineer's Estimate greater than, or equal to \$100,000, except as listed above.	Required

\* Criteria and guidance regarding simple preventive maintenance projects was issued via memorandum to the Regional Directors from the Office of Engineering and the Office of Operations on 2/12/93, Subject: Pavement Preventive Maintenance Projects Second Working Draft.

B. Engineer's Estimate

The fixed price for this item shall be determined as a function of the Engineer's Estimate (EE) as shown in Table 2. The fixed price lump sum will then be distributed as appropriate over all the engineering shares proportionally based on the cost of each engineering share, i.e. [FCO Cost x (Engineering Share Cost / EE Eligible Items)]. Any FCO engineering share value less than \$1,000 will be rounded downward to zero and all others will be rounded to the nearest \$1,000.

**Table 2 Estimating Item 697.02**

* Engineer's Estimate (EE Eligible Items)	Item 697.02 Value (FCO Cost)	Rounding
\$0.1 Million to \$5.0 Million	0.05 x EE	Nearest \$1,000
\$5.0 M to \$10.0 M	\$250,000 + 0.04 x (EE - \$5.0 M)	Nearest \$10,000
\$10.0 M to \$25.0 M	\$450,000 + 0.03 x (EE - \$10.0 M)	Nearest \$10,000
\$25.0 M to \$130.0 M	\$900,000 + 0.02 x (EE - \$25.0 M)	Nearest \$10,000
\$130.0 M and Above	\$3,500,000	

\* For contracts containing Incentive/Disincentive provisions, Lane Rental provisions, or any similar provisions, the Field Change Order amount and distribution should be calculated excluding the incentive/disincentive, lane rental or similar items.