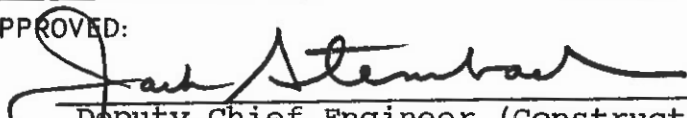


TO: MODIFIED BY EI 74-114 EFFECTIVE 12/13/1974	ENGINEERING INSTRUCTION NEW YORK STATE DEPARTMENT OF TRANSPORTATION
Distribution: <input checked="" type="checkbox"/> Main Office <input checked="" type="checkbox"/> Regions <input type="checkbox"/> Special	Code: <u>EI 74-1</u> Date: <u>2/13/74</u>
APPROVED:  Deputy Chief Engineer (Construction)	Supersedes:

This Instruction sets forth the relationships between field change sheets and orders-on-contract and associated processing and approval procedures.

A. Orders-on-Contract provide the mechanism for Federal and State approvals of deviations from the basic contract requirements; such as, changes in specifications, design or geometrics, the addition of new work, or increases in quantities beyond the contract amounts. In the delineation below, the distinction between "major" and "minor" must remain subjective. Major changes are those affecting the scope of a project, traffic service, or appreciable costs beyond the variations generally encountered to accommodate to field conditions or beyond contract amounts in any fiscal share. Minor changes include field adjustments within the contract quantities in any fiscal share which have no impact on scope or service and which cannot be construed as altering the basis upon which the contractor submitted his bid.

1. Orders-on-Contract need not be submitted in the following illustrative situations, providing contract item quantities in any fiscal share are not exceeded:
 - a. Minor changes in drainage locations or inverts. However, these should be recorded on the "as-built" plans.
 - b. Minor increases in excavation (which should, however, be approved by Soils) for undercutting, flattening slopes or daylighting cuts.
 - c. Minor variations in pile lengths (which must, however, be approved by the Structures Subdivision). This should not be construed as affecting the current procedures wherein the Structures Design and Construction Subdivision determines the lengths of piles to be driven or approves piles already driven to lesser depths than anticipated. All such variations must be called to the attention of the Structures Subdivision promptly.
 - d. Minor variations or additions to guide rail locations, sidewalk, curb, gutter, underdrain, and other miscellaneous appurtenances.

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- e. Erosion control work under Item 900, whether by unit price, agreed price, or force account. Prior approval by the Construction Subdivision, however, is needed for agreed price or force account work.
2. Orders-on-Contract must be submitted for the following types of changes:
 - a. Changes increasing contract item quantities in any fiscal share, including Item 900, or involving major costs.
 - b. Any changes in specifications, design standards, geometrics or traffic control devices.
 - c. Significant new work not specified in the Contract Plans even though contract unit bid prices may be considered applicable.
 - d. All work at agreed price. Where agreed prices are utilized for erosion control work under Item 900, an order-on-contract is not needed but prior written concurrence must be obtained from the Construction Subdivision.
 - e. All work done by force account, with the exception of erosion control under Item 900, but prior written concurrence for the latter must be obtained from the Construction Subdivision.
 - f. Significant changes introduced late in the contract which may incur delays to contract completion or be the subject of disputes or claims must first be discussed with the Construction Subdivision before proceeding with an order or the work.
 - g. Significant deletions of work from the contract.
- B. Field Change Sheets should be prepared where needed to provide clear-cut instructions to the contractor and construction supervisors regarding necessary changes to the Contract Plans, standards or signing. Where such instructions can be adequately conveyed by an order-on-contract including simple sketches, field change sheets need not be prepared but the modifications should be shown on the "as-built" plans.

Field change sheets and orders-on-contract involve three major categories of consideration:

1. Technical. Changes in design or specifications require review and concurrence by the original approving agents such as Design, Structures, Technical Services, Traffic and Safety, municipalities, public authorities, other State agencies, FHWA, and other federal agencies, as appropriate. The coordination of such approvals is best accomplished centrally and this has been assigned by the Chief Engineer to the Facilities Design Subdivision or the Structures Subdivision, as appropriate, who will forward the combined and summary recommendations to the Construction Subdivision for its further consideration relative

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to contract obligations, progress, and claims liability.

2. Financial. Increased contract costs require justification to and authorizations from the Comptroller's Office, the Budget Division, and the FHWA, as appropriate, and are to be coordinated by the Construction Subdivision.
3. Contract Claims. Changes late in the course of a contract or which involve major work which will extend the completion date are susceptible to contractor disputes and claims actions. These require careful review by the Construction Subdivision with the Chief Engineer and the Office of Legal Affairs.

The generalized procedure below for the processing of field change sheets and orders-on-contract is designed with the following objectives:

- a. Provide a central clearinghouse to insure that all of the above considerations are met.
- b. Provide adequate justifications to all approval agencies.
- c. Minimize effort by obtaining general approvals before undertaking extensive redesign, drafting, and processing.

c. Procedure

1. Minor Orders-on-Contract

Minor orders-on-contract which do not require associated field change sheets or do not involve major costs should be submitted directly to the Construction Subdivision as the need becomes apparent and before starting the work with full and adequate explanations included therein. The need for each item must be explained and any previous approvals by Soils, disputed work decisions by the Commissioner and recommendations by the Main Office or other groups documented. No work thereon may be started without prior documented approval from the Construction Subdivision.

2. Major Orders-on-Contract and Field Change Sheets

- a. Where changes appear to involve major costs or the preparation of field change sheets, the Region or other initiating agency should first forward a memo to the Construction Subdivision detailing the need for the changes, including the following items:
 - 1) The need for such changes, their benefits, and the consequences of not making the revisions at this time or as part of the Contract.

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- 2) The estimated total cost of such changes and whether by contract unit bid prices, force account or agreed price. Extensive computations should not be needed for such estimates since only an order of magnitude is desired at this point.
 - 3) Statements regarding concurrence by other Regional or Main Office Functional groups which have reviewed the proposed changes. It is desirable that the concerned Regional functional groups be consulted prior to the initiation of a change proposal and their supporting comments or objections included. These other Regional functional groups should obtain verbal or written concurrence from their main office organizations where appropriate. In addition, statements should be included relative to the possible effects on and/or positions of other agencies or the public.
 - 4) If maintenance or other resolutions will be needed, indicate status of preliminary negotiations or anticipated reactions.
 - 5) If additional right-of-way is needed, indicate estimated cost and potential difficulties.
 - 6) Indicate any potential public reactions regarding environmental considerations, tree removal, etc.
- b. The Construction Subdivision will coordinate the proposal informally with other concerned groups and telephone or TWX, followed by a written authorization, to the Region to proceed with the preparation of an order-on-contract and/or field change sheets with copies to other concerned main office groups. Such coordination will include referring the proposal to the Structures Design and Construction Subdivision who is responsible for obtaining FHWA and Comptroller's concurrence in matters affecting railroads and structures.
 - c. Where technical assistance in problem-solving is desired or required from other Main office groups; such as Structures, Design or Traffic and Safety, the Region should correspond directly with such groups with copies to the Construction Subdivision. Such correspondence shall be maintained by the Construction Subdivision in the Orders-on-Contract File for reference in subsequent action.
 - d. All field change sheets shall be forwarded by the Regions with a copy of the report requested in paragraph 2a above to the Construction Subdivision after such preparation has been authorized.

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- e. The field change sheets and report per C2a shall be forwarded by the Construction Subdivision to the Facilities Design or Structures Subdivisions, as appropriate, for coordination of reviews by Design, Structures, Traffic and Safety, Right-of-Way, and Federal and State agencies, as appropriate. All necessary changes shall be processed via the Facilities Design Subdivision and the Region and final drafts returned to the Construction Subdivision for signature approval with a statement regarding any major changes in scope or cost from those delineated in the original proposal memo requested in step C2a.
- f. The Field Change Sheets, upon approval, shall be returned to the Facilities Design Subdivision for issuance. Upon receipt of the approved field change sheets or informal notification of final approval, the Region shall process the related order-on-contract.
- g. Where major changes are noted in step C2e, the Construction Subdivision will revise the order-on-contract or request the Region to do so and process same for approvals.

3. Field Change Sheets Prepared by Main Office Groups

In some instances, field change sheets or orders-on-contract may be initiated by main office groups to reflect changes in structural designs, signing or other features. These should be forwarded to the Construction Subdivision in accordance with the foregoing procedures.

This procedure does not preclude emergency actions wherein the Structures Subdivision may authorize work or changes by phone, such as in matters affecting foundations where prompt action is necessary to avoid serious contract delays and to properly progress the work. The Construction Subdivision will be promptly advised of such instances, however, by the Structures Subdivision.

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