

SECTION 104—SCOPE OF WORK

104.01 INTENT OF PLANS AND SPECIFICATIONS—The intent of the plans and specifications is to prescribe a complete project undertaken according to the contract. Therefore, according to the contract, furnish material, equipment, tools, labor, and incidental work complete in place, unless otherwise provided, and be responsible for the complete supervision, performance, and completion of the work.

104.02 ALTERATION OF DRAWINGS OR WORK—The Department reserves the right to order, at any time during the progress of the work, increases or decreases in quantities and alterations in the construction drawings or specifications, including alterations in the grade or alignment of the road or structures. Any such order will be in writing by the Representative. Also, should any item contained in the proposal and contract be found unnecessary for the proper completion of the work, a written order will be given to eliminate such item from the contract. Such increases, decreases, eliminations, and/or alterations will not invalidate the contract, nor release the surety.

If the aforementioned changes in quantities or alterations of the construction drawings will significantly increase or decrease the cost of performing the work directly affected, perform such work only when authorized in writing, as specified in [Section 110.03\(a\)](#). Payment for such work will be made under [Section 110.03](#).

With the exception of advance warning signs, detour signs, work zone traffic control devices, and other items specified in the contract, perform no work beyond the limits of the project, except as authorized in writing by the Deputy Secretary for Highway Administration.

When an item of work is eliminated, reimbursement of actual expenses will be made as specified in [Section 110.03\(d\)](#). If the aforementioned changes in the quantities or alterations of the drawings are of such magnitude as to require a change in the time to complete the project, a time adjustment will be made as specified in [Section 108.06](#).

104.03 EXTRA WORK—Anticipate that extra work might be necessary in order to complete the project as contemplated. Perform extra work according to the specifications and only when authorized in writing, as specified in [Section 110.03](#). Compensation will be made as specified in [Section 110.03](#).

104.04 VALUE ENGINEERING—Value engineering applies to cost reduction proposals that are initiated, developed, and submitted to the Department for modifying the plans, the specifications, or other contract requirements. These provisions do not apply to a proposal unless it is identified as a value engineering proposal at the time it is submitted. The Department is not required to accept or act upon submitted value engineering proposals.

Value engineering proposals are those that would require a change in the contract and would result in either no cost increase or a net cost savings to the Department. They are initiated by the Contractor who proposes to provide the function of an improved product or service at the same cost or a lower cost, and to accomplish the original purpose of the project without impairing essential functions and characteristics.

Submit the following minimum information with each proposal, allowing enough time for Department investigation and implementation without interfering with the project schedule:

- a description of the difference between the existing contract requirements and the proposed change, with the comparative advantages and disadvantages of each;
- an itemized list of the contract requirements which are to be changed if the proposal is adopted, with a recommendation for making each change;
- a detailed estimate of the net savings in construction costs that will result from the adoption of the proposal;
- a prediction of any effects the proposed change will have on other Department costs, such as maintenance and operations, and rehabilitation;

- a statement of the deadline for adopting the change in order to obtain maximum cost reduction during the remainder of the contract, noting any effect on the Required Completion Date or any specified Milestone Date(s) and any other schedule impacts; and
- the contract items of work affected by the proposed change, including any quantity changes, as well as any extra work items to be established, including prices and back-up data.

When preparing the detailed estimate of the net savings in construction cost that will result from the adoption of the proposal, the cost of the new work must include any increase in future maintenance or operational costs. One-half of the engineering and development costs incurred may also be included in the cost of the new work.

The Department reserves the right to make the changes, without compensation, if a value engineering proposal is based upon, or similar to, standard specifications, standard special provisions, or [standard drawings](#) adopted before the award date for the contract.

The Department will judge the acceptability of a value engineering proposal and the estimated net cost savings to be realized from adoption of all or any part of the proposal. In evaluating the estimated net cost savings, the Department may disregard the contract bid prices if, in the judgment of the Department, such prices do not represent a fair measure of the value of the work to be performed or to be deleted. Within 30 calendar days after receipt of the required minimum information, as specified herein, the Department will review and provide notification of its acceptance or rejection of the value engineering proposal.

If the proposal is accepted in whole or in part, such acceptance will be by a letter from the District Executive or the Chief Engineer, Highway Administration, as applicable. If the approval of the Department is conditional, the letter will note the conditions. The letter will serve as authorization for the District to process a contract work order to incorporate the necessary changes in the plans and specifications to permit the value engineering proposal, or any part of it accepted, to be put into effect.

Continue to perform the work according to the requirements of the contract until the Department processes a work order incorporating the value engineering proposal, in whole or in part.

Acceptance and/or preparation of the value engineering proposal and performance of the work will not extend the Required Completion Date and/or any specified Milestone Date(s) unless a request for an adjustment is submitted, as specified in [Section 108.03\(b\)](#), and approved by the Representative.

The Department reserves the right to adopt all, or any part, of a value engineering proposal for general use on other contracts.

Value engineering proposals that are either identical or similar to previously submitted proposals, will be eligible for consideration and compensation under the provisions of this section if the previously submitted proposals were not adopted for general application to other contracts administered by the Department.

Compensation for the Contractor's share of the actual net cost savings associated with a value engineering proposal will be as specified in [Section 110.07](#).

104.05 CLEANING OF PROJECT SITE—Remove silt and other deposits from newly constructed culverts, inlet, outlet and parallel ditches, bridges, and other drainage structures, including stream channels. Clean and remove surplus and discarded material, equipment, and temporary structures from the project and adjacent properties, including waste and borrow areas. Remove debris and objectionable material from areas used or disturbed by the construction operations on, or within sight of, the highway. Remove paint marks or spills, stains, rust marks, oil, or any other unsuitable marks, as directed. Restore waste and borrow areas, as specified in [Section 105.14](#).

Maintain the vegetation within the constructed slope limits, including waste and borrow areas, and leave the project in a presentable condition.

The project will not be considered complete until the above work has been completed.

104.06 DISPOSAL OF EXISTING HIGHWAY STRUCTURES AND MATERIAL WITHIN THE PROJECT—Satisfactorily remove and dispose of all existing highway structures and material which are not to remain in place or to be used in the new construction. Unless otherwise directed, dispose of these structures and material off the project site. However, if indicated, the Department will retain drainage pipes, drainage grates or castings, guide rail posts, guide rail, bridges not under the authority of the Department, and/or portions of Department bridges. Such structures on all other highways become the property of the local authorities having jurisdiction. If the local authorities do not want to retain any portion or portions of structures or material under their jurisdiction, then remove and dispose of them off the project site.

104.07 MAINTENANCE OF EXISTING ROADWAY—The Department reserves the right to enter upon a project and, at its own expense, maintain the existing roadway. Notwithstanding the performance of such work by the Department, continue to comply with all the provisions specified in Sections [105.13](#) and [901](#).

104.08 UNEXPECTED HAZARDOUS WASTE—The encountering of hazardous waste will be considered a differing site condition, as specified in [Section 110.02\(b\)](#), unless the presence of such waste is indicated in the proposal or contract. Hazardous waste is defined as material meeting the definition of a hazardous waste or Toxic Substance Control Act, Regulated PCB Waste, as specified in 40 CFR 260 or 25 PA Code, Chapters 260 to 270, Hazardous Waste Regulations.

If unexpected hazardous waste is encountered at the site, the Representative will investigate the conditions, determine the extent of the affected area, and authorize the Contractor, in writing, to remove and dispose of the waste. Payment for such work will be made as specified in [Section 110.03](#).

The Contractor will not be required to perform or arrange for any work relating to the removal and disposal of unexpected hazardous waste. If the Contractor elects not to perform authorized waste removal and disposal work, notify the District Executive of that decision, in writing, within 2 working days of receipt of the Representative's written authorization. Cooperate fully with the Department and any authorized remediation Contractor, as specified in [Section 105.07](#).