



## Airport Improvement Program Grants – Change Orders and Supplemental Agreements

### PURPOSE

This document provides guidance regarding procedures for TDOT review of change orders and supplemental agreements for construction contracts funded by TDOT airport development grants. Please contact TDOT Aeronautics for further guidance on any questions you may have.

### DEFINITIONS

**Alteration of Work and Quantities:** Change in quantities and/or work as may be necessary or desirable to complete, in a satisfactory manner, the original intended work. Unless otherwise specified in the contract, the Sponsor's engineer or resident project representative may make, in writing, such in-scope alterations in the work and variation of quantities as may be necessary to complete the work, provided such action does not represent a significant change in the character of the work. A significant change in character of work means any change that is outside the current contract scope of work; any change (increase or decrease) in the total contract cost by more than 25%; or any change in the total cost of a major contract item by more than 25%. A significant change in the character of the work requires a Supplemental Agreement.

**Change Order:** A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for work within the scope of the contract and necessary to complete the project.

**Contractor:** The Sponsor's construction contractor that has been awarded the contract for performing the work funded by the TDOT grant.

**Extra Work:** An item of work not provided for in the awarded contract as previously modified by Change Order or Supplemental Agreement, but which is found by the Sponsor's engineer or resident project representative to be necessary to complete the work within the intended scope of the contract as previously modified.

**Major and Minor Contract Items:** A Major Contract Item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other items shall be considered Minor Contract Items.

**Sponsor:** A public agency that submits an application for an AIP grant or a private owner of a public-use airport that submits an application for an AIP grant for the airport; also, the owner of the airport project.

**Supplemental Agreement:** A written agreement between the Contractor and the Sponsor that establishes the basis of payment and contract time adjustment, if any, for the work affected by the Supplemental Agreement. A Supplemental Agreement is required if:

1. in-scope work would increase or decrease the total amount of the awarded contract by more than 25%;
2. in-scope work would increase or decrease the total of any major contract item by more than 25%;
3. work that is not in the scope of the originally awarded contract; or
4. adding or deleting any major contract item.

## GENERAL INFORMATION

### Contract Modifications

A contract modification may become necessary to facilitate the original intent of the project. Sponsors generally address such modifications by one of two contract instruments:

1. Change Order
2. Supplemental Agreement

Alterations of Work and Quantities that do not result in a 25% cost increase of a major item or a 25% increase in the total contract cost should be addressed under a Change Order. Sponsors must address alterations that exceed the 25% upper limit under a Supplemental Agreement. (Para. 40-02, AC 150/5370-10H).

### Coordination with TDOT

Sponsors should address issues regarding eligibility, reasonableness of costs, and funding justification for the modification with TDOT **prior to execution** of the contract modification. Failure to do so may result in the Sponsor assuming the cost of the entire modification without State or Federal participation.

The Sponsor can realize substantial savings of time, money and effort through advance coordination of contract modifications with TDOT Aeronautics. Concerns regarding eligibility, reasonableness of costs, and/or justification may be resolved by a simple phone call, thus reducing the chance of misdirected work efforts.

### Extra Work

Sponsors should not use change orders and supplemental agreements to add work items that are outside of the approved project scope of work as defined by the grant description. Savings that may result from the construction effort are not automatically available to add work elements outside of the approved scope or work.

### Commitment of Funds

Sponsors should note that TDOT's review and concurrence with a contract modification is limited to a determination of funding eligibility and **does not** represent a commitment of funds for the modification. TDOT's commitment of additional funding can only be accomplished by a grant amendment. In the event that eligible cost overruns exceed the original grant amount, the Sponsor may request an amendment to the original grant amount. While coordination with TDOT prior to executing contract modifications is required, an amendment to the Grant Agreement is provided once the grant budget has been expended and the amount of additional funding is identified. The processing times for executing grant amendments do not relieve the Sponsor of its obligations for prompt payment of the Contractor under state and federal law.

### Contractual Responsibility

The Sponsor alone is responsible for the settlement and satisfaction of all contractual and administrative issues involving procurements in support of an airport aid grant (2 CFR 200.318 (k)). The reviews and concurrences made by TDOT are for determination of funding eligibility.

### Modifications Due to Errors and Omissions

State and Federal policies limit participation to the minimum costs necessary to carry out a project. Costs associated with corrective modifications may not be fully eligible for funding participation. TDOT Aeronautics will assess all modifications for justification.

If the modification is corrective in nature, any duplicative work or re-work likely will be ineligible for funding participation. If the corrective action does not involve re-work, the modification itself may be fully eligible for funding participation; however, secondary costs may not be eligible.

Costs associated with errors and omissions are ineligible costs. TDOT Aeronautics relies on Sponsor certification that the plans and specifications are free of errors and omissions at the time of bidding. Additional design costs and inspection costs attributed to correcting an error or omission are not eligible. TDOT Aeronautics expects the Sponsor to track such costs as ineligible costs.



*Smyrna Airport in Smyrna, TN during Taxiway Foxtrot Hold Pad Repair*

### Grant Limitation

Reimbursement for costs based on concurrence with a contract modification from TDOT Aeronautics is subject to the limitations of the Grant Agreement.

Each TDOT grant contains a provision that limits the upward adjustment of the maximum liability to 15% over the original grant amount. Additional project costs that TDOT Aeronautics previously declared eligible for funding participation may ultimately be denied reimbursement if the cumulative additional costs exceed the 15% limitation.

Sponsors should take note that, while TDOT Aeronautics may increase the maximum liability of a grant up to 15% over the original obligation, actual reimbursement of such costs is contingent upon the availability of Federal and/or State funds to cover the increase. TDOT Aeronautics does not guarantee the availability of such funds. Sponsors should also note that funding amendments could take a significant amount of time.

# CONTRACT MODIFICATION REVIEW PROCESS

## Change Orders vs. Supplemental Agreements

Sponsors typically initiate a Change Order to address incidental Extra Work, eliminate items of work, or adjust final contract quantities. The work included in a Change Order must fall within the general scope of the contract.

Sponsors should use a Supplemental Agreement for Extra Work that does not fall within the general scope of the contract. Under a Supplemental Agreement, the Sponsor also must address the impact to the following contract requirements:

1. **Wage Rates:** Because a supplemental agreement is essentially a separate contract, the Sponsor should incorporate the current wage rate determination (Par. 940b, FAA Order 5100.38) if the supplement agreement exceeds \$2,000.
2. **Surety & Bonding:** Issuance of a Supplemental Agreement may require the consent of the Contractor's surety. If the Supplemental Agreement is significantly large in value, the sponsor may need to revise the existing performance and payment bonds or provide additional bonds.

## Administering Change Orders and Supplemental Agreements

Failure of the Sponsor or its engineer to properly administer a Change Order or Supplemental Agreement can financially encumber the sponsor by making a Change Order ineligible for reimbursement due to noncompliance with procurement rules. For example, failure to conduct a cost analysis may render the work ineligible for reimbursement regardless of whether the cost is deemed reasonable after the fact.

Sponsor administration may vary depending on many factors, including the extent of modification, time requirements, and the cost of the modification. The larger the cost impact, the greater is the need for advanced coordination with TDOT Aeronautics for purposes of review for funding eligibility.

## Eligibility

To become eligible, Sponsors must submit all proposed Change Orders and Supplemental Agreements to TDOT Aeronautics for a review and determination of funding eligibility. The review by TDOT Aeronautics addresses three general areas:

### **1. Allowability:**

Is the extra work permitted under the FAA Airport Improvement Program (AIP)? Improvements not permitted under the AIP are automatically ineligible.

Example: A Change Order is executed to add landscaping to the project. Costs under this Change Order are ineligible for reimbursement because the AIP statute does not permit AIP funds to be applied to landscaping.

Example: A Supplemental Agreement is executed to pave exclusive use areas. Costs under this Supplemental Agreement are ineligible for reimbursement because costs for paving exclusive use areas are not allowable under the AIP.

### **2. Justification:**

Is the additional work necessary to carry out the original approved project scope? If the Extra Work is not necessary to accomplish the approved scope of work, it is not justified for inclusion under the subject Grant Agreement. The Extra Work must be necessary to carry out the project as originally intended. If the Extra Work falls within the scope addressed by the grant description, but is outside the scope of the contract, a Change Order or Supplemental Agreement may be eligible for reimbursement if it is necessary to carry out the project as intended.

Example: Under an apron expansion project, the sponsor, due to favorable bids, might elect to add select panel replacement on a taxiway section outside of the work limits. Because such work is outside of the project description in the Grant Agreement, it is ineligible for reimbursement.

Example: A Supplemental Agreement to pave additional taxiway pavement is not justified for the project, even though the type of work is an allowable cost, where such paving is not necessary to complete the project as originally described.

Example: Work on an apron reconstruction project uncovers unforeseen sub-grade drainage concerns. The addition of a sub-grade drainage system would represent Extra Work that falls within the grant description and is necessary to carry out the project as intended. This work would likely be eligible for reimbursement.

### **3. Reasonableness of cost:**

A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost.

The determination of whether or not a cost is reasonable starts with the sponsor's preparation of a cost estimate. The sponsor uses this estimate to conduct a cost analysis of the proposed costs. TDOT expects the sponsor to enter into negotiations with the contractor for any change order item where other than minor differences exist. The sponsor concludes their analysis with a determination of a fair and equitable price.

While the sponsor's determination of a fair and equitable price goes a long way towards determining reasonableness of costs, it does not automatically constitute a determination of reasonable costs. As it relates to reimbursement under the AIP, TDOT Aeronautics has final determination as to whether a cost is reasonable.

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*“Sponsors should address issues regarding eligibility, reasonableness of costs, and funding justification for the modification **prior to execution of the contract modification.**”*

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## Cost Estimate

For contract modifications that modify unit prices or add new bid items, the sponsor must prepare an estimate **prior** to negotiating with the contractor (2 CFR 200.323). The estimate must include the signature and date of the preparer, which typically is the Sponsor's consultant. The Sponsor relies on this estimate when conducting its cost analysis.

Change Orders that are limited to a modification of the existing contract to reflect actual field quantities do not require preparation of an independent cost estimate; however, such Change Orders still require the Sponsor to prepare a justification for the altered quantities. All other Change Orders and Supplemental Agreements require a cost estimate.

## Cost Analysis

2 CFR 200.323 requires price or cost analysis for every contract action. Further, 2 CFR 200.323 specifically requires the Sponsor to negotiate profit as a separate element of price when competition is lacking. Change Orders that add Extra Work are by their nature non-competitive procurement actions. For this reason, Change Orders adding new work items require a cost analysis.

Under the cost analysis approach, the Contractor must break down its proposal into the various elements of costs such as labor, material, equipment, overhead and profit. To facilitate the analysis, the cost estimate should include a similar breakout.

Areas of moderate to significant differences between the estimate and the proposal, as it relates to work item time and cost, should be subject to negotiation.



*Outlaw Field Airport in Clarksville, TN after Major Reconstruction of the Primary Runway and Taxiway*

## Contract Quantity Adjustments

Modifications that affect existing contract work items already have an established unit price for that item. Unless the modification falls within the criteria of a supplemental agreement (major versus minor contract item), the established contract unit price will be considered a reasonable and fair price. It thus becomes an issue of justifying for the modified quantities.

TDOT recommends that Sponsors establish a final Change Order that addresses the adjustment of final contract quantities to reflect actual field quantities. The final Change Order should include an itemization of all modified bid item quantities. The Sponsor's engineer must also provide a justification that explains why these items require an adjustment.

The Sponsor and engineer should note that if there is an upward quantity adjustment, the Contractor may be entitled to a proportional increase in the contract time (Para. 80-07, AC 150/5370-10).

## Required Submittals for TDOT Concurrence

Sponsors must submit proposed Change Orders and Supplemental Agreements to the TDOT Project Manager for review **prior** to execution. This will allow the Sponsor to assess the consequences of TDOT Aeronautics' eligibility determination prior to committing to the contract modification.

### 1. **Change Order Submittal:**

At a minimum, the sponsor's submittal for a proposed Change Order shall contain the following:

- a. Sponsor cover letter that states the overall justification for the order and their recommendation.
- b. Draft Change Order document with estimated quantities, unit prices, description of work, any adjustment of contract time, and detailed justification of the work
- c. Copy of engineer's independent cost estimate
- d. Copy of cost analysis
- e. Record of negotiations
- f. Drawings/sketches (as applicable)
- g. Justification for time extension (as applicable)

### 2. **Supplement Agreement Submittal:**

At a minimum, the sponsor's submittal for a proposed Supplemental Agreement shall contain the following:

- a. Sponsor cover letter that states the justification for the extra work and their recommendation
- b. Draft Supplemental Agreement document with estimated quantities, unit prices, description of work and detailed justification of the work
- c. Copy of engineer's independent cost estimate.
- d. Copy of cost analysis
- e. Record of negotiations
- f. Drawings/sketches (as applicable).
- g. Revised Performance and Payment Bonds (as applicable).
- h. New wage rate determination (as applicable).
- i. Justification for time extension (as applicable).

## Formal Concurrence

The TDOT Project Manager will issue a determination letter that indicates one of the following actions:

1. Eligible
2. Partially Eligible
3. Ineligible

The determination letter will address limitations of the approval action, including:

- Advisory note that TDOT concurrence does not constitute a grant amendment.
- Limitations on funding participation for secondary costs (e.g. increases to design and inspection)
- Requirement to maintain a cost accounting system that properly tracks eligible costs separately from ineligible costs.

## Provisional Concurrence

For time critical modifications and small cost changes, the sponsor may seek and obtain provisional concurrence from TDOT Aeronautics. Such action is occasionally necessary to avoid delays to projects when sufficient information and time are not available to negotiate a Change Order under the conventional process. Most provisional concurrences will be via e-mail.

A provisional concurrence is tentative in nature. TDOT Aeronautics may rescind a provisional concurrence at a later date depending on the circumstances. To remove the provisional status, the Sponsor must provide the TDOT Project Manager the same documentation as required under the formal concurrence process.

If time is critical, the use of a time and material payment approach may be acceptable to initiate the extra work. Under this approach, the Sponsor must maintain accurate and detailed records that document contractor labor, material, and equipment charges. The ultimate goal is to convert the initial T&M payment method into a firm fixed price before the Extra Work is complete.



*Shelbyville Municipal Airport, Bomar Field, in Shelbyville, TN during major runway reconstruction and RSA improvements.*

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## Execution

Upon receiving formal concurrence from TDOT, the Sponsor shall forward one fully executed copy of the Change Order or Supplemental Agreement to the TDOT Project Manager. Sponsors that execute contract modifications prior to TDOT Aeronautics' determination of eligibility do so at their risk, as TDOT could subsequently deny AIP participation.

Unless there are extenuating circumstances that warrant the time and material payment approach with provisional concurrence as described above, the Contractor should not commence work until there is a signed Change Order or Supplemental Agreement in place between the Sponsor and the Contractor.

## **RESOURCES**

FAA AC 150/5370-10H: Standard Specifications for Construction of Airports; 2 CFR Part 200



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