

12. Contractor Payments

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12.1. General

A primary duty of the Project Engineer and the project staff is to see that the contractor receives timely progress payments for all work that has been acceptably completed. The Project Engineer must accept both the material and its installation before they authorize payment. Base payment on quantities calculated from source document measurements and linked by a clear audit trail between the source document and the calculations. All pay item quantities used in progress payments should appear in the progress summary referencing the pay item's quantity calculation file and the item's source documents measurements. The contract establishes the method of measurement and the basis of payment for each contract pay item; use these methods for calculating pay quantities, except on progress payments where interim quantities, on pay items not yet completed, may be estimated.

12.2. Calculation of Quantities

The Project Engineer is responsible for keeping adequate project records that establish the accepted quantity of work the contractor has completed under each pay item. The Project Engineer and the project staff should be thoroughly familiar with the methods of measurement for each pay item, and should measure them accordingly. If a pay item involves more than one source of funding, establish separate records for the quantities allocated to each source of funds. For partial completion of a pay item, you may estimate the interim quantity as long as the estimate has a justifiable basis (load counts, three-point cross-sections, or similar measurement). Measure and compute all final pay item quantities during the course of the project as soon as possible after completion of all work on the pay item.

Compute and check quantities of pay items before entering the quantities in the progress summary and using them for a progress payment. You may

calculate earthwork quantities using the Earthwork and Mass Quantity Computation sheets (Form 25D-40A) . Refer to section 4.6 for rounding procedures and significant decimals to be used in quantity calculations. Someone other than the original calculator must check all computations of pay quantities; correct errors and recheck the quantity. The signatures of the calculator and the checker, along with the date, must appear on the first page of any computations, with initials and dates on successive pages. If it is necessary to change or correct any calculations, you must follow the source document procedures shown in section 4.4.

Programmable calculators or computers may be used to calculate pay item quantities if the procedures or the program is listed in the file containing the computation sheets. Back up all computer-entered or -generated data as described in section 4.3. Use sketches, diagrams and drawings whenever necessary to explain or enhance the quantity calculations. In all cases, clearly show and reference the steps involved in going from the source document measurements, through the computation process, to the resultant quantity to establish a clear audit trail.

Take measurements of each pay item in the field or make them in the office in accordance with the methods established in the contract (section 10.4) or as noted above. The quantities calculated from those measurements should follow these guidelines; enter quantities in the progress summary.

- **Payment by Volume** (Cubic Yard, MBM): calculate from source document measurements using computer or calculator programs, or longhand using the average end area method or using simple dimensional calculations.
- **Payment by Area** (Acre, Square Yard, Square Foot): calculate from source document measurements using computer or calculator programs (complex acreage calculations for example), or using simple dimensional calculations.
- **Payment by Length** (Linear Foot, Mile): take measured lengths directly from the source documents to the progress summary.

- **Payment by Lump Sum:** calculate partial completion percentages in accordance with a proration method, as discussed in section 10.4, and the calculations should contain a validation statement.
- **Payment by Hours:** recorded hours may be extracted directly from the source document into the progress summary.
- **Payment by Item (Each, Only):** you may extract recorded quantities directly from the source document into the progress summary.
- **Payment by Volume Vehicle Measure (Cubic Yard Vehicle Measure):** extract daily quantities resulting from the daily load counts and vehicular dimensional measurements directly from the load count record sheets into the progress summary.
- **Payment by Weight (Ton, Lb.):** extract daily recorded weights directly from the source documents into the progress summary.
- **Payment by Time and Materials:** extract the cumulative recorded cost directly from the daily time & materials summary sheets (section 10.3) onto the progress estimate.
- **Payment by Plan Quantity:** inspector's acceptance statements establish the basis for paying for the item; take the quantity from the plans.
- **Estimated Payment by Load Count (volume measurement):** not normally specified in the contract as a method of measurement, you may use this method to determine interim quantities on pay items measured by volume; extract daily quantities resulting from the daily load counts and vehicular dimensional measurements directly from the load count record sheets into the progress summary.

12.3. Stockpiled Materials

Stockpiled materials are materials destined for incorporation into the project that have either been manufactured or been removed from their initial position and placed into storage until ready for use. Stockpiled materials fall into the three general categories described in section 11.1:

1. materials manufactured off-site by others, purchased by the contractor, transported, and placed in storage;
2. materials manufactured on- or off-site by the contractor or a subcontractor, transported or not, and placed in storage;
3. on- or off-site materials removed from their original position and placed in storage.

In the former category, purchase and freight invoices form the basis for stockpile payments. In the latter two categories, compare the cost allowed for production/removal and stockpiling of the material to the cost of incorporating the material into the project, and then allocate the item's unit price accordingly.

The contract spells out in detail all of the conditions that must be met before payment can be authorized for stockpiled materials, but generally they include the following conditions: the materials must meet contract requirements and be stored on the project site, or other location accessible to and acceptable to the Project Engineer; approved materials submittals, test reports, and certifications must be on file and verification made that the certifications and test results apply to the delivered materials; if stored at an approved off-site location, the contractor must insure the materials (if required by the contract), segregate them from the contractor's other operations, and identify the materials as pertaining to the project; for materials produced by the contractor or a subcontractor, the Project Engineer must have records to document both the quality and quantity of the materials before making a stockpile payment.

When the Department makes a stockpile payment, the material becomes the property of the Department. The contractor cannot dispose of the material outside of the project, and they must record any transfers, waste, etc. of the material and debit it out of the stockpile pay quantity. Similarly, when removing material from the stockpile for incorporation into the project, make an appropriate reduction in stockpile quantity and credit a similar increase into the pay item.

Give a stockpile allowance for the invoice price of the materials plus freight charges to the approved stockpile location. For all items, if the bid unit price does not reflect the true cost of the work, prorate the allowance for the stockpiled material to leave enough money for installation. The quantities of stockpiled materials paid for should never exceed the total estimated quantity required to complete the item.

Any materials included in a stockpile payment which the contractor does not incorporate into the project will be debited out of the stockpile total when the need for the material no longer exists. Handle excess stockpiled materials produced from Department-furnished sources in accordance with contract language; other excess stockpiled materials revert to contractor ownership unless the Department makes arrangements to purchase them.

12.4. Progress Summary

The progress summary is the start of the audit trail from the calculated quantity back to the source document. Its purpose is to gather all the calculated quantities for a pay item together in one location and lay out an audit trail, from the resultant quantity back through the calculations to the original source document measurement and acceptance. The progress summary, in the form of an estimate book or estimate files, is a cumulative compilation by contract pay item of quantities (interim through final) of work completed to date; the summary also contains information on where and how the quantity was calculated and on the source of the quantity measurements.

The format of the estimate book or estimate files may vary from project to project. One acceptable format is to use standard forms designed for setting up an estimate file with separate pages used for each pay item.

- Index sheet (Form 25D-162)
- Earthwork pay items measured by the station w/ Continuation sheet (Forms 25D-163 and 25D-065)
- Excavation pay items w/ Continuation sheet (Forms 25D-164 and 25D-065)
- Weighed pay items w/ Continuation sheet (Forms 25D-166 and 25D-065)
- Stockpiled materials w/ Continuation sheet (Forms 25D-168 and 25D-065)
- Item summary (Form 25D-170)
- Summary book (Form 25D-171A)

Items running the length of the project (clearing, grubbing, earthwork) can be broken into sections for

ease of measurement. On items paid by weight, enter the daily total weights on the form.

The forms should indicate the pay item's name and number, the method used to calculate the quantities, the location of the calculations, and the source of the measurement data (the source document). Fill out the estimate columns as you complete the calculations; if the contractor does not complete work on an item in a pay period, note that on the form. Once the contractor completes work on an item, no further entries are necessary. If you estimate the quantities, spell out the basis for the estimate. Retain calculation sheets for both estimated and calculated quantities in the pay item files. Examples of all these forms are in the Exhibits.

Interim quantities calculated for the progress summary need not be exact, however all estimated quantities must be reasonably commensurate with the work actually accomplished and a sufficient audit trail left in place back to the source documents.

12.5. Preparation of Progress Estimate

The contract details payment frequency, but we normally make progress payments at least once each month during periods of active work; the contract may allow twice monthly payments if requested by the contractor. In either case, prepare payment estimates promptly at the end of each pay period and develop them in accordance with the contract.

Work acceptably performed to date entitles the contractor to payment for the value of the work. Base progress payments on estimated quantities. Whether based on unit measure, breakdown of lump sum items, load count, engineering judgment, or another method, document the basis the Project Engineer uses for establishing estimated quantities in the progress summary. The Project Engineer must insure that the materials and work represented in the estimate conform to contract requirements and that the project records include all required documentation including materials submittals, invoices, and test results.

There are three standard forms/formats that provide a simplified means of reporting the work accomplished during each progress estimate period; however, any other format that provides the same information and contains the same certification statement is acceptable. The available forms are:

- Progress Estimate (Form 25D-197)

- Progress Estimate for Stockpiled Materials (Form 25D-198)
- Progress Estimate Recapitulation Form (25D-199)

On the Progress Estimate form, list the pay items in the same order as they appear in the Bid Schedule in the contract followed by a listing of contract change documents. Take pay item quantities from the progress summary and show them on the estimate form. Show interim quantities to the nearest whole unit; show final quantities to the appropriate significant decimal as outlined in section 4.6. Break out the items out according to funding source and eligibility (participating, non-participating, or deferred participating). This quantity breakout is necessary to insure that we pay the contractor the proper funds and to keep an accurate track of funding status throughout the project.

Carry the funding breakout forward to the recapitulation sheet, and show it by project number, AKSAS ledger code, program code, and account code. Code all contractor payments to the same program code, except for:

- contractor-furnished CE items (such as field office, field lab, vehicles, meals, and lodging).
- ARRF vehicles and airport snow removal equipment purchased by the Department on FAA-funded projects.

Code the exceptions to separate program codes. Each separate source of funding also requires an individual breakout on the recap sheet.

Report the cost of work accomplished under any change documents on the estimate under the respective bid items or show each change document separately at the end of the original pay items. If a change document establishes a new item of work, enter the change document on the estimate at the end of the original pay items. Maintain project records in such a manner that supporting data for payments made under each pay item and each category of funds is readily discernible.

On the recapitulation sheet, the “Original Contract Amount” is the original contract award amount. The “Amended Contract Amount” is the award amount adjusted by any approved change documents and quantity overruns/underruns; use this amount to verify encumbrance revisions. Use another calculation, the

“Probable Final Contract Amount,” on FAA-funded projects in place of the Amended Contract Amount; the probable final amount is the amended amount adjusted by anticipated quantity overruns/underruns and by anticipated additional work or claim settlements not formally added to the contract. Use this amount to forecast the need for grant increases. If withholding and liquidated damages are applicable, calculate them in accordance with the contract and show them on the recap form also.

The Department may withhold payment or a portion of a payment to a contractor only for reasons covered in the contract. If the Department is assessing liquidated damages and/or if the Project Engineer receives notification to withhold all or a portion of a future progress payment, the Project Engineer should immediately inform the contractor of the reason and the amount of the withholding. Show the amount withheld on the recap form, and continue to withhold it until the Project Engineer is notified that the contractor has satisfied the cause for the withholding.

Review progress payment quantities with the contractor prior to finalizing the forms as a matter of courtesy and to eliminate the possibility of processing delays if there are any disagreements. Once the Project Engineer receives the signed estimate back from the contractor, the Project Engineer should sign and date the estimate in the *Date Received from the Contractor* signature block. The Project Engineer should immediately forward the estimate to the Group Chief/PM.

As an incentive to promoting prompt payment, AS 36.90.200 provides for the payment of interest to the contractor if they fail to receive their payment promptly. If the contractor has not been paid within thirty (30) days of the date the Project Engineer signed and dated the date-received block (twenty-one (21) days if the project involves federal funds), the Department pays the contractor interest on the late payment at the statutory rate. Timely preparation and prompt processing of progress payments are one of the Project Engineer’s most important responsibilities.

The prime contractor must pay each subcontractor within eight (8) working days after receiving payment from which the subcontractor is to be paid (AS 36.90.210). Per AS 45.45.010 (a), the contractor must pay the subcontractor interest on the unpaid balance from the time the payment was due until it is paid.

12.6. Encumbrance Revisions & Revised PDAs

As the project progresses, the Project Engineer should keep a close watch on the remaining balance of funds encumbered to the contractor. So long as the encumbered balance equals or exceeds the estimated amount still owed the contractor, the Project Engineer does not need to take any action. If additional funds need to be set aside, as soon as the amount is known, the Project Engineer should complete an Encumbrance Memo form. The need for an increased encumbrance could result from a contract change document, or a quantity overrun. The Project Engineer should prepare the Encumbrance Memo listing the reasons for the increase and including supporting documentation (copies or listing of change documents, quantity calculations), and submitting it to the Group Chief/PM.

Any time there is a financial change or the possibility of a financial change in the contract amount, the Project Engineer should check the construction phase funding to see if there are sufficient funds to finance the change. Make this check on-line in AKSAS. The Project Engineer should communicate the need or possible need for additional funding to the Group Chief/PM as early as the need is recognized, for additional funding is not always available. The Project Engineer and Group Chief/PM should alert the project control unit of the situation at this point also. If an increase in funding is necessary and funds are available, the Project Engineer should complete a PDA (Project Development Authorization) Change Request form and submit it to the Group Chief/PM. Provide justification for the increase citing change documents, quantity increases, or whatever reason.

