

SECTION 109 MEASUREMENT AND PAYMENT

109.1 Measurement of Quantities

109.1.1 General

109.1.1.1 Bid Items Not Designated as Pay Plan Quantity

- (1) The engineer will use the US standard system to measure all work completed under the contract. The engineer will determine quantities of materials the contractor furnishes and work the contractor performs using measurement methods and computations conforming to standard engineering practice, modified to meet department requirements. The engineer will document these measurements using department procedures.
- (2) The engineer will measure the work as the contract measurement subsection for individual items specifies. The department will measure the actual quantities of work the contractor acceptably completes and make final payment based on those actual measured quantities except as follows:
 1. If the measurement subsection for a bid item specifically restricts the quantity measured for payment or allows for use of conversion factors.
 2. If the engineer and contractor execute a written supplemental contract agreement stating that contract quantities for specific bid items or portions of bid items substantially agree with their actual quantities, the department will pay for those contract quantities without measurement. That payment is full compensation for those bid items, or portions of bid items, as specified in 109.2.
 3. If the engineer executes a contract change order modifying the method of measurement for specific bid items, the engineer will measure the quantities of applicable bid items for payment using the change order methods.
 4. If the engineer, under 105.3.1(2), approves a contractor requested plan dimension change between US standard and SI metric dimensions, the engineer will measure whichever of the following is less:
 - Actual quantities constructed.
 - Quantities derived from the original plan dimensions.
 5. For substitutions made under 106.2.3 between US standard and SI metric products, the engineer will measure the actual quantities of the substitute products using the original contract measuring system.

109.1.1.2 Bid Items Designated as Pay Plan Quantity

109.1.1.2.1 General

- (1) If the schedule of items designates a bid item with a ****P**** in the item description, the department will not measure that bid item. The department will use the plan quantity, the approximate quantity the schedule of items shows, for payment unless one or more of the following occurs:
 1. A contract revision partially eliminates, completely eliminates, or affects the quantity for a designated bid item.
 2. The quantity for a designated bid item varies by more than 5 percent from the plan quantity.
 3. A quantity variation causes the value of the work under a designated bid item to vary by more than \$5000 from the bid amount.

109.1.1.2.2 Adjustments for Contract Revisions

- (1) The department will adjust the quantity for a designated bid item if the engineer revises the contract under 104.2 either with or without a change order. The engineer will either increase or decrease the affected quantity regardless of the magnitude of the revised work. The department will measure revised work as specified in 109.1.1.1. This adjustment has no impact on potential quantity changes the engineer might make under 109.1.1.2.3.
- (2) If the department partially eliminates or completely eliminates a designated item, the department will pay for the designated item as specified in 109.5.

109.1.1.2.3 Adjustments for Quantity Variations

- (1) If the actual work performed, excluding contract revisions, exceeds either the quantity threshold of item 2 of 109.1.1.2.1(1) or the value threshold of item 3 of 109.1.1.2.1(1), the engineer will adjust the affected quantity. Either the engineer or the contractor may identify an item for potential adjustment. If the contractor believes a quantity adjustment is necessary, notify the engineer as required under 104.3. Provide sufficient detail on the bid item in question to justify the engineer's review of that quantity.

- (2) The engineer may adjust the quantity by re-computing or measuring all or only those portions of a bid item that vary from the plan quantity. The department will adjust the quantity to account for the entire variation from the plan quantity. If the engineer re-computes or measures only a portion of a bid item, the engineer will determine the quantity for the balance of that bid item based on the unaffected plan quantity.

109.1.2 Area

- (1) If the contract designates payment for a measured area, the engineer will measure the length and width of the area actually constructed within engineer-designated limits, or the final dimensions measured along the surface of the completed work within the neat lines the plans show or the engineer designates. The engineer will use the method or combination of methods of measurement that reflect, with reasonable accuracy, the actual surface area of the finished work as the engineer determines.
- (2) If the contract allows, the engineer may weigh or determine a volume and convert to area for payment. The engineer will determine the weight-to-area or volume-to-area conversion factors. The engineer and contractor must agree on the conversion factor before the engineer converts a pay quantity.

109.1.3 Volume

- (1) For material specified for measurement by volume in the vehicle, haul the material in engineer-approved vehicles. Ensure that the vehicle body type allows for ready and accurate measurement of the contents.
- (2) The engineer will determine the approved capacity of vehicles to the nearest 1/10 cubic yard (0.1 m³). Unless all department-approved vehicles on a job have the same capacity, mark each vehicle with a plainly legible identification mark showing the approved capacity. Do not change capacity markings without the engineer's consent.
- (3) The engineer will measure the material in the vehicle at the point of delivery. The engineer will make no adjustment for the settlement of material during transit. The engineer may reject loads not hauled in department-approved vehicles.
- (4) If the contract allows, the engineer may weigh material and convert to a volume for payment. The engineer will determine the weight to volume conversion factors. The engineer and contractor must agree on the conversion factor before the engineer converts a pay quantity.

109.1.4 Weight

- (1) For aggregates and asphaltic mixtures specified for measurement by weight, weigh the material on platform scales or other engineer-approved scales. Include the cost to furnish scales in the bid price. Furnishing scales is incidental to the work. Use scales that the engineer has tested and determined to be satisfactory, or ensure that authorized testing firms or agencies test the scales as often as the engineer deems necessary to ascertain their accuracy.
- (2) If weighing materials in the hauling vehicle, check gross weights and determine the vehicle tare weight whenever the engineer directs.
- (3) If the contract allows, the engineer may measure the volume of material and convert to weight for payment. The engineer will determine the volume to weight conversion factors. The engineer and contractor must agree on the conversion factor before the engineer converts a pay quantity.

109.2 Scope of Payment

- (1) The department will use the US standard unit prices the schedule of items shows to pay for the work.
- (2) The department will pay for the quantity of work acceptably completed and measured for payment as the measurement subsection for each bid item specifies. Within the payment subsections provide means to furnish and install the work complete and in-place. Payment is full compensation for everything required to perform the work under the applicable bid items including, but not limited to, the work elements listed in the payment subsection. Payment also includes all of the following not specifically excluded in that payment subsection:
 1. Furnishing and installing all materials as well as furnishing the labor, tools, supplies, equipment, and incidentals necessary to perform the work.
 2. All losses or damages, except as specified in 107.14, arising from one or more of the following, until the engineer makes final acceptance:
 - The nature of the work.
 - The action of the elements.
 - Unforeseen difficulties encountered during prosecution of the work.

3. All insurance costs, expenses, and risks connected with the prosecution of the work.
 4. All expenses incurred because of an engineer-ordered suspension, except as specified in 104.2.2.3.
 5. All infringements of patents, trademarks, or copyrights.
 6. All other expenses incurred to complete and protect the work under the contract.
- (3) The department may withhold payments due under the contract until the contractor proves to the department that the contractor has paid for all labor and materials used in the work.

109.3 Payment for Altered Quantities

- (1) If the measured quantity for a bid item varies from the quantity given in the proposal, the department will make payment at the original contract bid price for the quantity measured as specified in 109.1.1.1(2). The department will adjust payment for revisions in plans or quantities of work requiring contract change orders as specified in 104.2.
- (2) The department will not pay the contractor for loss of expected reimbursement or anticipated profits suffered or claimed by the contractor. The department will not make revisions to the contract bid prices except as specified in 104.2.

109.4 Price Adjustments for Contract Revisions

109.4.1 General

- (1) If the department revises the contract under 104.2, the department will adjust the contract price using the sequence specified in 109.4.2 through 109.4.5. This price adjustment includes payment for performing the revised work, delay costs, and all other associated costs the engineer deems reasonable and not expressly precluded in 109.4.6. The department may, at anytime, direct the contractor to perform all or part of the revised work under force account.
- (2) If a contract revision includes a time adjustment for compensable delays under items 2 through 5 of 108.10.3(2), the department will adjust the contract price for delay costs as specified in 109.4.7.

109.4.2 Contract Bid Prices

- (1) Before proceeding to another pricing method, the engineer will attempt to price revised work using contract bid prices.

109.4.3 Minor Contract Revisions Not Covered by Contract Bid Prices

- (1) The engineer and contractor may agree on the scope of, and a lump sum price for, work done under a contract revision conforming to the following conditions:
 1. The contract revision is not covered by contract bid prices.
 2. The contract revision is limited in scope.
 3. The absolute value of the revision will not exceed \$5000. Determine the absolute value of the revision by summing the absolute dollar value of all deletions and the absolute dollar value of all additions.
- (2) This agreed lump sum price includes payment for performing the revised work, delay costs, and all other associated costs. Do not proceed with the revised work without agreement. If the contractor and engineer do not agree on a lump sum price, the engineer will negotiate a price under 109.4.4 or have the contractor proceed under force account as specified in 109.4.5.

109.4.4 Negotiated Prices

- (1) The engineer and contractor will negotiate the price of a contract revision for one or more of the following:
 1. Adjustments in contract bid prices are necessary due to a significant change as specified in 104.2.2.4.
 2. The engineer and contractor cannot agree on a revised price under 109.4.2 or 109.4.3.
- (2) Provide an estimate of the proposed unit prices or lump sum price for the contract revision. Include the cost of performing the revised work, delay costs, all other associated costs, plus a reasonable allowance for profit and applicable overhead. The engineer may request that the contractor justify the estimate by providing one or more of the following:
 1. Labor requirements by trade in hours for each task.
 2. Equipment costs and time requirements.
 3. Material costs.

- (3) Provide the justification within 5 business days after the department's request. The department will respond to the estimate within 5 business days after receipt of the contractor's justification. The department and the contractor can mutually agree to extend these 5-day requirements.
- (4) If the department negotiates with the contractor but does not agree on a price adjustment, the engineer may direct the contractor to perform all or part of the revised work under force account.

109.4.5 Force Account

109.4.5.1 General

- (1) The engineer may direct the contractor to perform the revised work under force account. Submit a written proposal for the work including the planned equipment, materials, labor, and work schedule.
- (2) The department will pay the contractor as specified in 109.4.5.2 through 109.4.5.6, as full compensation for performing the force account work, delay costs, and all other associated costs. At the end of each workday, the contractor's representative and the inspector shall compare records of the work done under force account. The department will make no force account payment before the contractor submits an itemized statement of the costs for that work.
- (3) Provide the following content in itemized statements for all force account work:
 1. Name, classification, date, daily hours, total hours, rate, and amount for all labor.
 2. Designation, dates, daily hours, total hours of actual operation and stand-by operation, rental rate, and amount for each unit of equipment, or the applicable hourly equipment expense rate for each truck or other unit of machinery and equipment. Include the manufacturer's name or trademark, model number, and year of manufacture with the designation.
 3. Quantities of materials and prices.
 4. Transportation charges on materials, free on board (f.o.b.) at the job site.
 5. Cost of property damage, liability, and workers compensation insurance premiums; unemployment insurance contributions; and social security tax.
 6. Documentation showing payment for all invoiced work.
 7. If materials are taken from contractor's stock and original receipted invoices for the materials and transportation charges cannot be provided, provide an affidavit and certify the following:
 - The materials were taken from the contractor's stock.
 - The quantity shown was actually used for the force account work.
 - The price and transportation costs represent the actual cost to the contractor.
- (4) The department will pay for force account work based on the engineer's review of the actual invoice costs the contractor submits. The engineer will approve payment for costs the engineer deems reasonable based on experience or prevailing market rates. The engineer may request that the contractor provide additional evidence to support costs the engineer questions. The department will only pay for costs the engineer approves.

109.4.5.2 Labor

- (1) The department will pay the contractor's labor costs, at prevailing wage rates or at wage rates previously agreed upon with the department in writing, for personnel directly involved in producing and supervising the force account work. The department will only pay for hours that personnel are actually engaged in force account work. The department will also reimburse the contractor based on actual invoiced costs paid to, or on behalf of, workers for subsistence and travel benefits, health and welfare benefits, pension fund benefits, or other contractor-paid benefits. The department will pay an additional 35 percent markup of these wages and benefits.
- (2) The department will pay no part of wages or benefits for personnel connected with the contractor's forces above the classification of foreman and having only general supervisory responsibility for the force account work.

109.4.5.3 Insurance

- (1) The department will pay the contractor based on actual invoiced costs for property damage, liability, and workers compensation insurance premiums, unemployment insurance contributions, and social security taxes on force account work. The department will pay an additional 15 percent markup of these costs. The contractor shall furnish satisfactory evidence of the rates actually paid.

109.4.5.4 Materials

- (1) The department will pay the contractor based on actual invoice costs, including applicable taxes and actual freight charges, for engineer-approved materials the contractor uses in force account work. The department will pay an additional 15 percent markup of these costs. If the contractor uses materials from the contractor's stock, the department and the contractor will agree on the price. Do not incorporate materials into the work without agreement.
- (2) The department reserves the right to furnish materials as it deems appropriate. Make no claims for costs, overhead, or profit on materials that the department provides.

109.4.5.5 Equipment

109.4.5.5.1 General

- (1) The department will pay the contractor's costs for equipment the engineer deems necessary to perform the force account work for the time the engineer directs or until the contractor completes the force account work, whichever happens first. The department will pay the contractor for equipment only during the hours that it is operated. The department will pay for non-operating hours at the stand-by rate as specified in 109.4.5.5.3. Report equipment hours to the nearest 1/2-hour.
- (2) The department will pay for use of contractor-owned equipment the engineer approves for force account work at published rates. The department will pay the contractor expense rates, as modified in 109.4.5.5, given in the Rental Rate Blue Book for Construction Equipment (blue book) published by EquipmentWatch, Prism Business Media Inc. Base all rates on the blue book rental rate chapter revisions effective on January 1 for all equipment used in that calendar year.
- (3) For each piece of equipment the contractor uses, whether bought or rented, the contractor shall provide the engineer with the following information:
 1. Manufacturer's name.
 2. Equipment type.
 3. Year of manufacture.
 4. Model number.
 5. Type of fuel used.
 6. Horsepower rating.
 7. Attachments required, together with their size or capacity.
 8. All further information necessary to determine the proper rate.
- (4) The contractor shall provide for the engineer's confirmation, the manufacturer's ratings and manufacturer approved modifications required to classify equipment for rental rate determination. For equipment with no direct power unit, use a unit of at least the minimum recommended manufacturer's rating.
- (5) The department will not pay rental for tools or equipment with a replacement value of \$500 or less.
- (6) Use engineer-approved equipment in good working condition and providing normal output or production. The engineer may reject equipment not in good working condition or not properly sized for efficient performance of the work.
- (7) For equipment not listed in the blue book, provide an expense rate and furnish cost data to support that rate. Obtain the engineer's written approval for the expense rate before using that equipment on force account work.

109.4.5.5.2 Hourly Equipment Expense Rates (Without Operators)

- (1) The contractor shall determine, and the department will confirm, hourly equipment expense rates as follows:

$$\text{HEER} = [\text{RAF} \times \text{ARA} \times (\text{R}/176)] + \text{HOC}$$

Where:

HEER = Hourly equipment expense rate.

RAF = Blue book regional adjustment factor.

ARA = Blue book age rate adjustment factor.

R = Current blue book monthly rate.

HOC = Blue book estimated hourly operating cost.

- (2) The blue book hourly operating cost represents all costs of equipment operation, including fuel and oil, lubrication, field repairs, tires, expendable parts, and supplies.

109.4.5.5.3 Hourly Equipment Stand-By Rate

- (1) For equipment that is in operational condition and is standing-by with the engineer's approval, the contractor shall determine, and the department will confirm, the hourly stand-by rate as follows:

$$\text{HSBR} = \text{RAF} \times \text{ARA} \times (\text{R}/176) \times (1/2)$$

Where:

HSBR = Hourly stand-by rate.

RAF = Blue book regional adjustment factor.

ARA = Blue book age rate adjustment factor.

R = Current blue book monthly rate.

- (2) The department will limit payment for stand-by to 10 hours or less per day up to 40 hours per week. The department will not pay the contractor for equipment that is inoperable due to breakdown. The department will not pay for idle equipment if the contractor suspends work or if the contractor is maintaining or repairing the equipment.

109.4.5.5.4 Hourly Outside-Rented Equipment Rate

- (1) If the contractor rents or leases equipment from a third party for force account work, the contractor shall determine, and the department will confirm, the hourly outside-rented equipment rate as follows:

$$\text{HORER} = \text{HRI} + \text{HOC}$$

Where:

HORER = Hourly outside-rented equipment rate

HRI = Hourly rental invoice costs prorated for the actual number of hours that rented equipment is operated solely on force account work

HOC = Blue book hourly operating cost.

109.4.5.5.5 Owner-Operated Equipment

- (1) For rental of equipment owned and operated by persons other than the contractor or their subcontractors, the department will pay the contractor based on the actual paid invoice. Provide an invoice that includes all costs for furnishing and operating the equipment. Obtain the engineer's written approval of the rental rates before starting the force account work.
- (2) The department will allow the contractor to add a markup on the invoice for owner-operated equipment. Determine the markup in the same manner as specified in 109.4.5.6 for subcontractors.

109.4.5.5.6 Moving of Equipment

- (1) The department will pay the contractor at the hourly equipment expense rate, as specified in 109.4.5.5.2, for time required to move needed equipment under its own power to the location of the force account work and to return it to its original location on the project. The department will pay the contractor at the hourly equipment expense rate, as specified in 109.4.5.5.2, for the transporting vehicle only if it is transporting equipment to, from, and within the project.
- (2) The department will pay the contractor for actual freight costs of equipment moved by commercial carrier.

109.4.5.6 Force Account Work by Subcontractors

- (1) If a subcontractor performs force account work, the department will allow the contractor a markup on work the subcontractor performs as follows:
 1. Use a markup of 10 percent for the first \$10,000 of work.
 2. Use a markup of 2 percent for work in excess of \$10,000.

109.4.6 Non-Allowable Charges for Adjustment of Contract Prices

- (1) Whether contract revision price adjustments are based on contract bid prices, agreed lump sum prices, negotiated prices, or force account, the department will not reimburse the contractor for the following:
 1. Profit in excess of that specified in 109.4.2 through 109.4.5.
 2. Loss of anticipated profit.

3. Home office overhead.
4. Consequential damages, including loss of bonding capacity, loss of bidding opportunities, and insolvency.
5. Indirect costs.
6. Attorneys fees, claims preparation expenses, or costs of litigation.
7. Interest.

109.4.7 Price Adjustments for Delay Costs

109.4.7.1 General

- (1) For a compensable delay under items 2 through 5 of 108.10.3(2), the department will pay for the costs specified here in 109.4.7.2. The department will not pay for non-allowable charges specified in 109.4.6 nor duplicate payment made under 109.4.2 through 109.4.5.
- (2) The department will only pay the contractor for costs the contractor actually incurs. The department will make no payment for delay costs before the contractor submits an itemized statement of those costs. Provide the content specified in 109.4.5.1(3), for the applicable items, in this statement.

109.4.7.2 Allowable Delay Costs

109.4.7.2.1 Extended Field Overhead

- (1) The department will pay the contractor for extended field overhead costs that include costs for general field supervision, field office facilities and supplies, and for maintenance of field operations.
- (2) General field supervision costs include, but are not limited to, field supervisors, assistants, watchman, clerical, and other field support staff. Compute these labor costs as specified in 109.4.5.2(1). For salaried personnel, calculate the daily wage rate actually paid by dividing the weekly salary by 5 days per week.
- (3) Field office facility and supply costs include, but are not limited to, field office trailers, tool trailers, office equipment rental, temporary toilets, and other incidental facilities and supplies. Compute these costs on a calendar-day basis using actual costs incurred due to the delay to provide these services.
- (4) Maintenance of field operations costs include, but are not limited to, telephone, electric, water, and other similar expenses. Compute these costs on a calendar-day basis using actual costs incurred due to the delay to maintain these services.

109.4.7.2.2 Extended Labor

- (1) Compute labor costs during delays as specified in 109.4.5.2 for all non-salaried personnel remaining on the project as required under collective bargaining agreements or for other engineer-approved reasons.

109.4.7.2.3 Escalated Labor

- (1) To receive payment for escalated labor, demonstrate that the department-caused delay forced the work to be performed during a period when labor costs were higher than planned at the time of bid. Provide adequate support documentation for the costs, allowances, and benefits specified in 109.4.5.2.

109.4.7.2.4 Equipment Stand-By or Equipment Demobilization

- (1) The department will pay the contractor the stand-by rate calculated in 109.4.5.5.3 for equipment, other than small tools, that must remain on the project during delays. The department will pay the contractor's transportation costs to remove and return equipment not required on the project during delays.

109.4.7.2.5 Materials Escalation or Material Storage

- (1) The department will pay the contractor for increased material costs or material storage costs due to the delay. Obtain the engineer's approval before storing material due to a delay.

109.5 Eliminated Items

- (1) If the department partially eliminates or completely eliminates a bid item as specified in 104.2.2.5, the department will pay contractor costs incurred due to that elimination. The department will pay a fair and equitable amount covering all costs incurred as of the date the work was deleted. Immediately submit a certified statement covering all money expended for the eliminated bid item.
- (2) The department will execute a contract change order for the following costs related to an eliminated bid item:
 1. Preparation expenses defined as follows:

- If preparation for the eliminated bid item has no value to other contract bid items, the department will reimburse the contractor in full for that preparation.
 - If preparation for work on the eliminated bid item would ordinarily be distributed over other contract bid items, the department will prorate reimbursement based on the value of the eliminated bid item compared to the total value of all associated contract bid items.
2. All restocking and cancellation charges.
 3. A reasonable allowance for applicable overhead.
- (3) If the department partially eliminates or completely eliminates a bid item, the department may pay for, and take ownership of, materials or supplies the contractor has already purchased.

109.6 Progress Payments

109.6.1 General

- (1) The department will first prepare a progress payment estimate as described in 109.6.3, and then will make a progress payment based on the engineer's estimate of the quantities of work completed. Payment will be at the contract or agreed unit or lump sum prices. The department may suspend progress payments if the contractor does not comply with the engineer's directions as the contract specifies. The department will notify the contractor immediately whenever progress payments are suspended.
- (2) The department will restrict progress payments, as specified in 108.4, until the engineer accepts the contractor's progress schedule. Progress payment restrictions are specified in 108.4.2.1(5) for bar chart schedules, in 108.4.3.2(5) for RBC schedules, and in 108.4.4.3(6) for CPM schedules.
- (3) The department's payment of an estimate before final acceptance of the work does not constitute the department's acceptance of the work, and does not relieve the contractor of responsibility for:
 1. Protecting, repairing, correcting, or renewing the work.
 2. Replacing all defects in the construction or in the materials used in the construction of the work under the contract, or responsibility for damage attributable to these defects.
- (4) The contractor is responsible for all defects or damage that the engineer may discover on or before the engineer's final inspection and acceptance of the work. The engineer is the sole judge of these defects or damage, and the contractor is liable to the department for not correcting all defects or damage.
- (5) The department will take ownership of all material and work covered by progress payments. However, the contractor remains solely responsible for all materials and work covered by progress payments and for the restoration of damaged work as specified in 107.14. Also, by making the progress payment, the department waives no requirement, right, or term of the contract as specified in 107.16.

109.6.2 Frequency

- (1) The department will make 2 progress payments each month, as feasible, if the contractor is due a payment of \$1000 or more. The department may reduce this minimum payment due for contracts of \$25,000 or less.

109.6.3 Preparation of Progress Payment Estimate

109.6.3.1 General

- (1) The department will compute quantities to reflect the approximate amount of work completed, or substantially completed, under the pertinent contract bid items to the date of the progress payment estimate. The department will adjust quantities to cover contingencies and costs for finishing or maintaining the work. If the engineer bases the progress payment estimate on contract quantities, the department will adjust quantities to cover variations between the contract and final quantities.

109.6.3.1.1 Pending Contract Change Order Work

- (1) Between the times the engineer authorizes a contract change order and the department executes it, the engineer will include, in the progress payment estimate, the value of the acceptably completed change order work. The department will pay at least 90 percent of the value of the work as it is completed under an unexecuted change order. After the department executes the change order, the department will deduct payments made on the unexecuted change order work from future payments due the contractor.

109.6.3.2 Materials

109.6.3.2.1 General

- (1) The engineer may include in the progress payment estimate the value of materials that:
 1. Are specifically manufactured, produced, or purchased for incorporation as a permanent part of the work.
 2. Are delivered to the project or stored at a location off the project as specified in 106.4.
 3. Are stored separately and irrevocably assigned to the project if stockpiled at plants or fabrication sites.
- (2) The engineer will require the contractor to document costs for materials included in a progress payment estimate. Provide the required invoice, billing, title, or assignment documents including a complete material description, identification, and cost data.
- (3) If the contractor does not satisfy all vendor claims made against the contractor for materials within 30 calendar days after receiving the progress payment, the department may cancel the applicable materials payment in the next progress payment estimate.
- (4) If making progress payments for materials, the engineer will not exceed the delivered cost or contract amount for the material complete in place. The engineer will use those amounts paid for materials to reduce future payments due the contractor for completed work incorporating those materials.

109.6.3.2.2 Structural Steel

- (1) On contracts containing 250 tons (250 Mg) or more of structural steel, the engineer may also include in the progress payment estimate the value of Structural Steel Carbon or Structural Steel HS, or both, to be used in the completed work and that has been delivered to the fabricator.
- (2) In addition to the information required in 109.6.3.2.1, provide the weights, dimensions, and heat and unit numbers.
- (3) Store the structural steel separately. Use stored structural steel only for fabrication of structural components to be used on the contract.
- (4) Present acceptable evidence indicating satisfactory fabrication of structural steel. The engineer may include, in the estimate prepared for progress payment, the value of this fabricated material, determined by multiplying the total unit weight of the material by 80 percent of the contract unit price.

109.6.3.3 Retainage

- (1) The department will withhold retainage from progress payment estimates for liquidated damages and claims including the following:
 1. To provide for recovery of liquidated damages assessable against the contract under 108.11.
 2. To cover claims against the contract filed with the department under chapter 779 of the Wisconsin statutes.
 3. To provide for recovery of damage and tort claims assessable against the contract under 107.12.
- (2) In addition to the above retainage, the department will retain 5 percent of each estimate that exceeds 75 percent of the original contract value until the department finally accepts the work. When the contractor substantially completes the work under the contract or upon completion and acceptance of the work, and pending final payment, the engineer may choose to reduce the amount retained.

109.7 Acceptance and Final Payment

- (1) After the department makes final acceptance of the work as specified in 105.11.2 and receives required document submittals and materials test reports, the engineer will submit to the contractor the semi-final estimate of the quantities for the work performed by the contractor.
- (2) Within 90 calendar days after receiving the semi-final estimate, submit to the engineer a written statement of agreement or disagreement with the semi-final estimate. For an acceptable statement of disagreement, submit an item-by-item list with reasons for each disagreement. If the contractor does not submit this written statement within those 90 days, the engineer will process the final estimate for payment. The engineer and the contractor can mutually agree to extend this 90-day submission requirement.
- (3) If the contractor submits an acceptable statement of disagreement, the department will withhold payment of the final estimate and determine the validity of the contractor's disagreement. After considering the contractor's statement, the department may revise the final estimate based on the engineer's judgment of the validity of the contractor's disagreement.
- (4) The department will make final payment within one year after the date the contractor provides the department with written confirmation of the semi-final estimate, or within one year after expiration of the 90-day period specified in 109.7(2), whichever applies. If the department does not make payment as

required, the department will pay interest, compounded monthly, on the balance due at the rate specified in section 16.528(2)(a) of the Wisconsin statutes.

- (5) If the department has been notified that there are multiple claims against the amount held and the department concludes that it cannot appropriately choose between or among the conflicting claims, the department may withhold payment of the amount at issue pending resolution of those conflicts. Upon resolution of all issues affecting rights to the amount held, the department will make payment to the claimant or claimants.
- (6) The department may correct progress estimates and payments in the final estimate and payment.

109.8 No Assignment of Payments

- (1) The department will pay the contractor all payments due under the contract, or any part of the contract, as specified in section 109. The department will recognize no contractor-executed assignment or order directing payment of all, or any portion of, the funds to any other person or persons.