

## SECTION 109.00 - MEASUREMENT AND PAYMENT

**109.01 Measurement of Quantities.** Measure all work as required by the contract. Make measurements using instruments with the appropriate units. Perform measurement and computation calculations by recognized methods used in the highway construction industry. Discuss any unusual measurement or computation methods with the Contractor before performing the measurements, so there is an understanding on how the work will be measured for payment.

The specifications allow minor material quantities to be measured by either volume or by weight methods. Discuss and agree upon conversion factors with the Contractor before the work begins. Document the agreed conversion factor in writing via change order.

Check measurement and metering devices, such as water meters, to ensure their accuracy. If these metering devices are found to be inaccurate, the Contractor must recalibrate the device before proceeding with the work.

### Weight Measurement.

**All weight tickets must be saved in ProjectWise.**

**Platform Scales.** The Contractor is required to provide scales for weight measurements that are Engineer approved. See [ITD Standard Specifications For Highway Construction \(SSHC\)](#) [109.01.A.6.b](#) for requirements. Do not approve scales that have not been certified by an independent scale company. Independent certified scale companies hired by the Contractor and approved before use shall check platform scales. Keep a scale check log at each scale location. The [ITD-2216](#), Scale Approval Log Sheet, is provided for this purpose. Place the form in the project files after the operation is completed.

If any doubt exists as to the accuracy of any scale, the scale should be inspected and certified again by the Contractor. Weighing equipment shall be accurate to within one percent. The Engineer may require platform scales to be inspected and re-calibrated. Document inspections in the daily diary and enter on the scale log.

If the material delivery point is within the weigh person's sight, a checker is not needed provided the situation is documented.

**Tickets.** Determine and record the tare weight of each truck daily. Retain the tare tickets with the daily tickets or tally sheets. Do not issue tickets or accept loads that are over legal weight limits. **No exceptions are made for overweight loads.**

Account for every Contractor issued weigh ticket. Tickets are normally computer generated at the scale station and delivered to the job site with the driver. Ticket records are a part of the job records and are to be preserved with other project records. **Do not accept hand written tickets.**

When weighing material, the scale controller shall print on the tickets the current date, current time, project name, project number, contract pay item number, load number, truck number, load gross weight, load tare weight and net weight. Document the moisture percentage when it exceeds the specified limit. The Engineer may elect to list time on the ticket for control of certain operations. If the scale is equipped with a tare beam, only the net load need be recorded.

The checker receiving the load shall retain the original ticket as a check, with the log retained by the scale controller.

The checker should note the material placement location on enough tickets to permit subsequent location of the material. Turn the tickets in to the Engineer's office for checking at the end of each day. Maintain a running total to facilitate checking.

**Quantity Tally Sheet.** The Engineer may direct the following procedure for documenting material loads received with the [ITD-2010](#), Quantity Tally Sheet - Weight Measurement:

- The scale controller will fill out the quantity tally sheet in duplicate, recording the time, truck number, and net weight.
- The checker will also make out a quantity tally sheet, recording the time, truck number, and the station placed on a sufficient number of loads to identify the load locations. The truck driver may be required to initial the tally sheet for each load.
- At the end of the day, a comparison will be made of the checker's tally sheet and the scale controller's tally sheet to verify what truckloads reached the project. Only include loads received by the checker in the total entered in the ledger. Provide an explanation for loads weighed but not received on the project.
- Give a copy of the scale controller's and the checker's quantity tally sheets to the Contractor.
- Make moisture corrections for each load as needed, and show adjustments on the scale controller's quantity tally sheet.

**Conveyer Scales.** The Department only accepts the use of conveyor scales that meet Idaho Department of Agriculture, Division of Agricultural Markets, Bureau of Weights and Measures requirements. The Contractor must provide a certificate of conformance number that is verified with the Idaho Bureau of Weights and Measures.

The conveyor is to be installed and operated in accordance with the manufacturer's recommendation. Slippage of material along the belt should not occur.

Perform a **Zero-Load Test** each day. If a belt-conveyer scale system has been idle for a period of two or more hours, run the system at least 30 minutes when the temperature is above 41°F. Additional warm-up time for colder conditions or other variances is required before beginning the zero-load test. The variation between the beginning and ending indication of the master weight totalizer shall be less than one scale division when the instrument is operated at no load

for a period equivalent to that required to deliver the minimum totalized load of 1000 scale divisions. Conduct the zero-load test over a whole number of belt revolutions, but at least three revolutions or 10 minutes of operation, whichever is greater. During any portion of the zero-load test, ensure the totalizer change is three scale divisions or less from its initial indication.

Perform a **Material Test** each week of operation in accordance with the conveyor scale manufacturer's recommendations. Use bulk material, preferably the material that the device normally weighs. Convey a pre-weighed material quantity over the conveyor scale similar to actual loading conditions. The material test load weighing method will depend on the conveyor scale capacity and the availability of a suitable scale for the test material. Where practical, use the substitution weighing method. Observe the following precautions to assure that the test load is accurately weighed:

- Ensure containers (railroad cars, trucks, or boxes) do not leak or loose material due to overloading.
- Determine the actual empty container tare weight at the test load time. Do not use stenciled tare weight on railway cars or trucks. Determine gross and tare weights on the same scale.
- When a pre-weighed test load passes over the scale, examine the belt-loading hopper before and after the test to assure that the hopper is empty and that only the test load material has passed over the scale.
- When using a railway track scale to weigh the test load, 48 hours or less should elapse between the conveyor scale test and the test load weight determination. When other scales are used, determine test load weight within 8 hours.
- Do not conduct the test if the test load weight has been affected by environmental conditions.
- On initial verification, conduct at least three individual tests. On subsequent verifications, conduct at least two individual tests. Do not determine the equipment performance by averaging the individual tests results. Ensure each test result is within the tolerance limits.

The above test procedures are from the [National Institute of Standards and Technology, Handbook 44.](#)

Checkers on conveyor scale weighing operations should compare the load size with the quantity on the printed weight ticket for reasonableness. If it is apparent that the conveyor scale is in error, the checker should not accept material until the error is corrected.

A Department inspector should observe the daily zero-load test and the material test. Also, make conveyor scale spot checks each day to observe the ticket printer operation and whether material is sticking to the belt.

The inspector will record the totalizer reading each shift, and reconcile differences between the totalizer reading and the total accepted by the checker as soon as possible (preferably no later than the next day).

**Automatic Weighing Equipment.** Automatic weighing equipment (hopper load cells, electronic platform scales, etc.) may be used with written Engineer approval. The Contractor shall furnish documentation assuring that an independent certified scale company has certified the automatic weighing equipment. Frequent random checks may be required.

The Contractor shall provide printed tickets to the Engineer. Obtain the Contractor's entire hauling fleet tare weight no less than once per day. Check automatic weighing equipment daily and document checks in the daily construction diary.

**Volume Truck Measure.** The checker at the point of delivery will record the volume delivered on the blank marked "Net Weight". Once each shift, or at such other interval determined necessary, a load shall be struck level to check on the volume contained in the load. The [ITD-2010](#), Quantity Tally Sheet – Weight Measurement, may be used in lieu of tickets.

**Moisture Correction.** The Department will not pay for Granular borrow or aggregate with a moisture content greater than four percent of the dry weight unless otherwise specified. Correct the material weight for moisture above four percent.

This moisture correction means that moisture present at the weighing time up to the specified percentage, will be included in the aggregate quantity for payment. Payment for this moisture will be included regardless of its origin or method of addition, and includes moisture from a natural pit, aggregate washing, or water added at the crusher. The quantity of material produced must be reconciled with plan quantities by including the water (moisture) weight.

At the end of each shift, the moisture tests that exceed the specified limit will be averaged. Apply this average percentage to the material quantity that is wetter than the specified moisture content. Prepare one deduction ticket for each shift and attach it to the checker's quantity tally sheet. An acceptable alternate method is to deduct moisture on each ticket.

When aggregate from a stockpile is for a "load, haul, and place" item, the Department will not pay for any moisture added in excess of existing stockpile moisture, except as required under [SSHC 403.07](#). The Department will not pay for moisture in excess of that allowed in the Specifications.

## 109.02 Scope of Payment.

**Price Adjustment.** As a means of allocating risk between the Department and the Contractor, the Department will allow price adjustments to applicable contract items as a payment to the Contractor or a credit to the Department when fuel and asphalt prices rise and fall, respectively, as defined in [SSHC 109.02](#). Fuel and asphalt price adjustments should be computed using the [ITD-2624](#) and [ITD-2625](#) forms. Instructions for filling out these forms are included with the forms.

Fuel price adjustments were never intended to be applied to every contract bid item. Only those items that tend to use large amounts of fuel which are listed in [ITD-2624](#) are covered. Fuel adjustments should not be applied to other contract items.

Work performed at no expense to the Department is not eligible for adjustments.

Guidance for administering fuel and asphalt price adjustments, including the published monthly fuel ([BFI & CFI](#)) and asphalt ([BAI & CAI](#)) indexes, can be found on the [ITD website](#) under DOING BUSINESS WITH ITD.

## **109.03 Payment for Quantity Variations, Contract Revisions, and Delays.**

**General.** The specifications allow work to be accomplished on a force account basis when specified or necessary. In order to avoid misunderstandings and possible disputes, a meeting between the Contractor and the Engineer should be held for the following purposes before force account work begins:

- Discuss the scope and nature of the work to be performed and establish a plan of operation.
- Determine the labor, equipment, and material required to perform the work and the availability of each.
- Discuss time keeping methods for labor and equipment, materials cost accounting, and documentation required to support Contractor payments.
- Discuss subcontracted, sub-subcontracted, owner-operator and professional service work; discuss and identify who will be the General Superintendent (not paid on force account) and who the Foreman in charge (paid on force account) will be.
- Agree on wage rates, material specifications and prices, and any travel/subsistence rates before the work begins, using the appropriate pricing methods and the Specifications.
- Agree on equipment rental rates, before the work begins, using the Blue Book and Specifications. The Engineer may disallow the use of equipment which is not in good working condition or that cannot be operated in a safe manner. The Engineer may also disallow equipment that is cost prohibitive. An example would be disapproving the use of a D-9 dozer when a D-6 dozer is all that is required. However, each situation must be reviewed on its own merits. For example, a D-9 dozer may be onsite and a D-6 may not; therefore, upon review, the D-9 may be cheaper when the D-6 transportation costs are taken into account. In lieu of disapproval, the Engineer may seek a negotiated agreement with the Contractor for use of the equipment at a reduced rate from that shown in the Blue Book. Agree on the negotiated rates in writing before the work begins. Rental rates higher than shown in the Blue Book may be approved for conditions that would subject equipment to greater than normal wear and tear.

**Executing Force Account Work.** If a Foreman is supervising some non-force account work, his or her time spent on Force Account work must be prorated between the different work activities.

Reimburse the Contractor for payroll burdens and fringe benefits for labor incurred on force account work. Provide acceptable documentation (e.g., [ITD-0370](#), Labor Weekly Force Account).

The Contractor directs the work unless a change order is executed that gives this responsibility to the Engineer. The Engineer is responsible to ensure that force account work is performed in the most cost-effective manner possible.

The Engineer may require the use of any available equipment best suited for the work, recognizing the fact that such use on force account work should not cause cessation of work which normally could proceed otherwise, unless it is in the best interest of the Department.

Rental equipment available from sources other than the Contractor and more economical to the Department, considering the type of work, duration of the work, etc., should be brought to the Contractor's attention with a request that such equipment be made available.

For rental rates not in the Equipment Rental Blue Book, estimate the rate by extrapolating similar equipment or by checking the rates charged by local rental companies. If necessary contact the Construction/Materials (CM) Section for guidance. Attach a copy of the Blue Book rental rate or other documentation to the [ITD-0371](#), Equipment Weekly Force Account.

When standby time is to be ordered by the Engineer, there must be a meeting with the Contractor to discuss the situation. Standby rate on equipment will be as specified in [SSHC 109.03.C.5.f](#). Standby rate should not be utilized for extended periods of time when it would be more economical to release a particular piece of equipment from force account and recall its use later when it is again required. Also, standby rate should not be paid when a piece of equipment is down for repairs.

On equipment that must be assembled (such as crane booms, crawler tractor dozer attachments, and concrete deck machines), pay for the assembly work unless other arrangements are made. On equipment such as cranes, it may be necessary to start paying the agreed hourly rate when the crane leaves the owner's yard and continue until the work is finished. Agree upon payment of assembly and disassembly work before the work begins.

When equipment is not operating or handled to provide normal output or production, negotiate a reduced rate. This also applies when equipment is driven to the project under its own power (see [SSHC 109.03.C.5.f.6](#)).

Pay equipment transportation costs to and from a project for force account work. Examples include: haul truck, trailer, driver, and special permit fees.

Small shop tools having a listed rental rate of less than \$10.00/day will be considered incidental, and will not be paid for separately.

If it is necessary for the Contractor to rent equipment from a rental agency, the Engineer is to verify the rate is competitive.

Materials acquired for force account work must meet the same acceptance criteria as other contract materials, unless otherwise approved by change order. Sales tax included on materials invoices is considered part of the actual materials cost. Materials quantities should be tracked using the [ITD-0372](#) (Materials Weekly Force Account).

Payment for overhead and profit is included in the force account mark-ups.

Force account expenditures should be summarized using the [ITD-0373](#) (Force Account Summary).

**Payment of Administrative Expenses.** Pay an administrative expense for coordinating work with an approved first or lower tier subcontractor, including professional service contractors, as stated in [SSHC 109.03.C.5.i.](#) If the force account work by a subcontractor is performed along with regular contract work, reimbursement for administrative expenses will be prorated on the force account work total amount for Labor, Equipment and Materials supplied by the subcontractor or a lower tier subcontractor. Administrative expenses are only paid once per force account occurrence and are never paid for each tier of subcontracting.

**Reports.** Use forms [ITD-0370](#), Labor Weekly Force Account; [ITD-0371](#), Equipment Weekly Force Account; [ITD-0372](#), Materials Weekly Force Account; and the [ITD-0373](#), Force Account Summary Sheet to tracking force account work.

## 109.05 Partial Payments.

All pay documents must be saved as PDF's in ProjectWise.

Make partial payments to the Contractor at least once each month or bimonthly at the Contractor's request. Make these progress payments only for accepted work. When the Engineer's orders have not been fulfilled, payment may also be withheld. Generally, this withholding of payment is only for the specific work in question.

Timely submission of progress estimates is an important part of good contract administration. Both final and progress estimates, must be submitted as soon as possible. Construction work shall be accurately accounted for and paid without overpayment.

Progress estimates should be sent to the Contractor for signature within three days following the agreed cutoff dates. Because the Contractor's signature is optional on intermediate progress pay estimates, an estimate copy may be sent to the Contractor and used internally for processing. Only the final estimate requires the Contractor's signature. Attach an explanation letter for any item(s) not paid for, any deductions, adjustments, or issues that need clarification or that may be controversial, so the Contractor clearly knows what is being done.

Include payment for acceptable work, including extra work ordered, on the progress estimate for the period that the work was accomplished. If a change order has not been completely processed, work can still be paid on an estimate if the authorizing authority has approved the work and pricing, and the completed work is acceptable.

Consider withholding of all or part of the payment estimates when the Contractor is out of compliance with any of the following:

- Failure to correct deficient work or complete incomplete work
- Failure to maintain completed work or correct deficiencies resulting from the Contractor's failure to provide proper maintenance
- Failure to submit timely CPM schedules per 108.03
- Failure to provide material certifications
- Failure to provide certified payrolls
- Failure to provide adequate storm water management practices
- Failure to provide prompt payment to subcontractors or suppliers.

Ensure that the work being paid for is acceptable, and meets the plans and specifications requirements. It may become difficult, from the Department's standpoint, to request rework that has already been paid for. The Engineer should not wait until the project is substantially complete to prepare a punch list for corrective action. This list should be ongoing and progress payments made or adjusted accordingly.

**Retention.** To comply with 49CFR requirements, the Department may not withhold retainage on progress estimates.

If there is a question of work integrity or of overpayment, the Engineer may deduct from the next partial payment once defective work or overpayment is discovered.

Even though the Department is no longer withholding retainage, a consent of surety letter is still required from the performance bond surety to cover the following two situations:

1. The Department overpays the Contractor.
2. The Contractor fails to pay all taxes owed.

A consent of surety letter example is presented below:



November 2, 2015

Telephone: 763-302-7100  
Fax: 763-302-7200  
Website: [www.willis.com](http://www.willis.com)

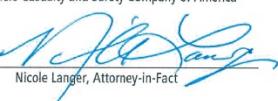
Direct Line: 763-302-7214  
E-mail: [Nicole.Langer@willis.com](mailto:Nicole.Langer@willis.com)

Idaho Transportation Department  
PO Box 837  
Lewiston, ID 83501

Re: Project: Broadway Bridge, Boise  
Federal Aid Project Nos. A011(588)  
Contract No. 8036 Key No. 11588  
County: Ada Location: Idaho

As surety for the above referenced project, we consent to the release of contract retainage (and/or 100% progress payments). In accordance with subsections 107.02 and 109.05 of the Standard Specifications for Highway Construction, surety hereby guarantees, under its performance bond, to promptly repay the Idaho Transportation Department for any overpayments, and further agrees to promptly pay any tax claims made pursuant to Title 63, Chapter 15, Idaho Code.

Liberty Mutual Insurance Company  
Travelers Casualty and Surety Company of America

By:   
Nicole Langer, Attorney-in-Fact

Willis of Minnesota, Inc.  
1600 Utica Avenue, Suite 600  
Minneapolis, MN 55416

**Prompt Payment to Subcontractors.** The Disadvantaged Business Enterprise (DBE) program requires that subcontractors be promptly paid by prime contractors for work items as they are performed and accepted by the Engineer. The following specification changes were made to [SSHC 109.05](#) to ensure prompt payment is made:

*Pay each subcontractor or supplier by the 20<sup>th</sup> calendar day after receiving payment from the Department, provided work performed by the subcontractor or supplier complies with contract requirements. Return retainage to each subcontractor or supplier by the 20<sup>th</sup> calendar day after the subcontractor or supplier completes work satisfactorily.*

*Certify to the Engineer that the Contractor provided payments to subcontractors or suppliers within the time specified in this section for each partial payment.*

*ITD's Diversity Management Tracking System will send an automated notice to Contractors that receive an estimate payment to log in and report payments made to subcontractors and suppliers during that time period. The payment information will be verified by the subcontractors and suppliers.*

*Ensure that first or lower tier subcontractors or suppliers meet these requirements.*

At the pre-construction conference, instruct the Contractor on how to access the Diversity Management Tracking System for Contractor self-reporting. If the Contractor fails to self-report, the Engineer will be notified so that appropriate actions, including pay estimate withholding as described above, can be taken to bring the Contractor back into compliance.

**Full Contract Obligation.** Each District Engineer should insure that sufficient funds are obligated at all times to cover all current estimated costs (including incentives and contingencies) on each project under contract in their respective District.

The Engineer should estimate the final construction costs when construction expenditures reach 85 percent for any project within the contract. However, estimates should be performed earlier when warranted (e.g. when large cost change orders or quantity overruns occur).

Cost impacts for bid item quantity over and under runs should be assessed as well as costs associated with change order work to mitigate the potential for obligating funds less than, or in excess of, what is actually needed.

Change orders should not be approved unless sufficient funds are obligated to the project to cover these cost increases.

**Assignment of Proceeds.** [Section 67-1022, Idaho Code](#), gives the authority to recognize assignments of obligations owing by the State to the State Controller, who is the only State official authorized to accept an assignment. District personnel, when contacted by Contractors or others concerning assignments, shall obtain the name, address, and phone number of the person who contacted them, and notify ITD's Legal Section.

Legal will contact the party in question and provide them with the necessary information and/or forms ([Figure 109.05-1a-d](#)) for pursuing the assignment. This form can be downloaded from the internet at the following address: <http://www.sco.idaho.gov>. Following approval of the assignment by the State Board of Examiners, the State Controller will send copies to the Assignee, the Assignor, and the Department's Controller. The Controller will arrange for preparation of the expenditure voucher, in accordance with the assignment.

**STATE BOARD OF EXAMINERS**  
**Request for Recognition of Assignment**

"Assignor" as used herein is \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

"Assignee" as used herein is \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

"Board" as used herein is the State of  
Idaho.

"Controller" as used here is the State Controller and  
Secretary to the Board.

WHEREAS, the Assignor is or may be obligated to make  
payments to the Assignee to its contractual or other  
obligation, which is described as follows:

Project No. \_\_\_\_\_, PROJECT NO.:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WHEREAS, Assignor has agreed with Assignee to assign all  
rights of payment for the above obligations to Assignee as  
reflected by the attached Agreement; and

NOW THEREFORE, pursuant to I.C. Sec. 67-1022, Assignee  
requests the Board to specially approve assignment of the above  
obligations on the conditions listed below:

REQUEST FOR RECOGNITION OF ASSIGNMENT - Page 1

Figure 109.05-1a

(1) Assignee agrees that its rights shall be subordinate to any claims the State of Idaho or any of its instrumentalities have or may have against Assignee in the future. These claims include, but are not limited to contracts, tort claims, taxes, fines or penalties of any kind.

(2) If the state receives more amounts owed to Assignor, Assignee will evaluate such claims at a cost of evaluating such claims. The evaluation is limited to reasonable attorney's fees, travel costs and any other expenses incurred in investigating conflicting claims and any travel costs as necessary. It is intended that Assignee be made whole in any dispute over the sums involved.

(3) In consideration of the payment of amounts made by the state to Assignee on the above-mentioned claims, Assignee agrees to defend, indemnify and hold the State of Idaho for any claims made against Assignee as a result from such payments to Assignee. It is intended that the State of Idaho be made whole in any dispute involving payments made to Assignee.

The undersigned certifies that he/she is duly authorized by Assignee to execute this Agreement.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

ASSIGNEEASSIGNOR

Signature: \_\_\_\_\_ Signature: \_\_\_\_\_  
Name: \_\_\_\_\_ Name: \_\_\_\_\_  
Title: \_\_\_\_\_ Title: \_\_\_\_\_

Figure 109.05-1b

State of \_\_\_\_\_ )  
                    : ss.  
County of \_\_\_\_\_ )

On this \_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_,  
the undersigned, a Notary Public in and for said state, personally  
appeared \_\_\_\_\_ known to me to be the  
ASSIGNEE whose name is subscribed to the within and foregoing  
instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto affixed my  
official seal the day and year \_\_\_\_\_  
written.

(SEAL)

Notary Public for \_\_\_\_\_  
Residing at \_\_\_\_\_  
My commission expires \_\_\_\_\_

of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

On this \_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, before me, the  
undersigned, a Notary Public in and for said state, personally  
appeared \_\_\_\_\_, known to me to be the ASSIGNOR  
whose name is subscribed to the within and foregoing instrument,  
and acknowledged to me that he executed the same.

REQUEST FOR RECOGNITION OF ASSIGNMENT - Page 3

Figure 109.05-1c

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

(SEAL)

Notary Public for \_\_\_\_\_  
Residing at \_\_\_\_\_  
My commission exp' \_\_\_\_\_

The Board, having duly consid  
to I.C. Sec. 67-1022, specially \_\_\_\_\_  
\_\_\_\_\_ effective seven (7) days \_\_\_\_\_  
Examiners. \_\_\_\_\_  
est pursuant \_\_\_\_\_  
request on \_\_\_\_\_  
ssignment shall be \_\_\_\_\_  
y the State Board of \_\_\_\_\_

J.D. WILLIAMS, Secretary  
State Board of Examiners and  
State Controller

Re: After the Assignee and Assignor have completed this form it  
should be mailed to:

State Controller  
Attn: Phyllis Richards  
P.O. Box 83720  
700 West State Street  
Boise, Idaho 83720-0011

After the State Board of Examiners approves the Assignment, each of  
you will receive an executed copy.

REQUEST FOR RECOGNITION OF ASSIGNMENT - Page 4

Form approved by Board of Examiners 12-13-88--amended 2-14-86

Figure 109.05-1d

**109.06 Payment for Material on Hand.** Pay for materials on hand when delivered to the project or stored in an acceptable storage place as described in [SSHC 109.06](#). An "acceptable storage place" is considered as one that is under the control of the Contractor, and generally located on or adjacent to the project site.

An exception to this interpretation may be made in the case of precast or pre-stressed concrete beams, steel bridge girders, handrail, or signs. Depending on the individual circumstances, accept storage in the supplier or fabricator's yard, or other facilities away from the project. When storage is away from the project and materials verification is made by other than project personnel, the inspecting party shall provide documentation in a letter to the Engineer.

The amount paid for materials on hand should represent the fair value of the materials, including freight and sales tax, as evidenced by invoices, production costs estimates, or bid prices less the remaining work cost to incorporate the material into the project. The Contractor must request such payments in writing.

Lump sum items include materials, labor, equipment, and profit. Materials on hand will be paid as a percentage of the lump sum item. As an example of a project using WINCAPS, if a lump sum item is \$100,000 and an invoice is received from the Contractor for \$25,000 for materials, 0.25 will be posted as the quantity to the WINCAPS ledger sheet for payment for this material. If an additional invoice is received from the Contractor for \$15,000 then an entry of 0.15 will be added to the WINCAPS ledger sheet to cover this material payment. This material percentage is calculated from the whole lump sum amount, not the remaining lump sum balance. The total of materials, labor, equipment, and profit should not exceed the quantity of one. The materials percent should not exceed 75% of the whole.

Material on Hand (MOH) stockpile quantities and prices are administered within SiteManager by going to Contract Administration, then to Contract Records, and finally to Stockpiled Materials. MOH accounts are drawn down as those materials are installed and paid for in the Inspectors' Daily Work Report pay items.

Invoice quantities cannot exceed the authorized contract item quantity. When multiple invoices are received, the material on hand unit price shall be adjusted to reflect the new amount needed to balance.

On multi-project contracts, the material on hand will be posted on projects based on the split in the detailed estimate, unless the material being paid for is to be used on only one project.

To correct a payment made for material on hand in excess of the contract amount based on plan quantity, a corrective entry will be made to the material on hand WINCAPS ledger to deduct the overpayment for material on hand.

**109.07 Allowance for Materials Left on Hand.** Pay for materials left on hand when delivered to designated storage locations. The Resident Engineer shall verify material quantities, and coordinate the materials inventory and transfer to District Supply.

Project personnel should verify plan quantities and be continually alert for conditions that will change the required project quantities to avoid having large material quantities remaining on hand at the job completion.

When aggregates are crushed and stockpiled before use, the Contractor must be responsible for determining the stockpile quantity. Contractors should be discouraged from producing excess material in anticipation of selling the excess to the Department. The specifications clearly state that the option to purchase excess aggregates stockpiled at an approved location lies with the Department, not the Contractor. Normally, stockpiled material left on hand will be measured by the average end area method.

Refer to Administrative Policy 5539, Construction Materials Remaining on Hand, and [SSHC 104.02](#) and [108.09](#) of this manual for further information about handling materials left on hand.

**109.08 Acceptance and Final Payment.** By the time the project is completed, inspection personnel should have reviewed and checked most of the quantities. Complete the remaining quantity checks immediately, with the records inspection completed by the District Records Inspector in a timely manner. Submit the final estimate to the Contractor by certified letter, which requires a return receipt.

Inform the Contractor of the necessary forms that are required to accompany the final estimate before payment can be made. The letter should discuss any penalties that will be assessed due to pending laboratory results that may impose an amount to be withheld.

The Engineer may also deduct pending asphalt failures and note in the letter, if applicable. The Contractor must be directed to submit a check to the Department covering the asphalt penalty amount.

Submit the final inspection and final estimate and records review, [ITD-1996](#), and other required forms with the final estimate. This report should reflect the total project cost as listed on the final estimate. Disregard pending asphalt price adjustments costs or pending claims. If there are pending claims, the Contractor should be informed in the transmittal letter that the claims are being analyzed, and that final estimate acceptance will not jeopardize settlement of claims filed before the final estimate.