

## SECTION 9 MEASUREMENT AND PAYMENT

### 9-1 MEASUREMENT OF QUANTITIES

**9-1.1 General** - Measurements of the completed work shall be in accordance with, and by instruments and devices calibrated to, United States Standard Measures or Metric System of Measurement, and the units of measurement for payment, and the limits thereof, shall be as shown on the plans or the special provisions or in the absence thereof, as set forth in these specifications.

In determining quantities, all measurements shall be made in horizontal or vertical planes unless otherwise specified.

**9-1.2 Methods of Measurement** - Materials and items of work which are to be paid for on the basis of measurement shall be measured in accordance with the methods stipulated in the particular sections involved.

**9-1.3 Certified Weights** - When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing the actual net weights. The City may accept the certificates as evidence of the weights delivered.

**9-1.4 Units of Measurement** - Measurements, conversions, multiples and fractions thereof shall be in accordance with U.S. Standard Measures. A pound is an avoirdupois pound. A ton is 2,000 pounds. The unit of liquid measure is the U.S. gallon. The units of area are square feet and square yards and the unit of volume is cubic yards. Unit of length is linear feet.

When materials are to be measured and paid for on a volume basis, and it would be impractical to determine the volume, or when requested by the Contractor in writing and approved by the Engineer in writing, the material will be weighed and converted to volume measurement for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer before such method of measurement of pay quantities will be adopted.

Unless otherwise specified, units of measurement are as determined in place based on neat lines as indicated on Contract Plans or Drawings without regard to expansion or compaction.

**9-1.5 Quantities to be Deducted from Payments** - Quantities of materials will not be paid for and such quantities will not be included in the final total quantities, when such materials are:

1. Wasted or disposed of in a manner not called for under the Contract, and
2. Rejected materials, including materials rejected after it has been placed, and
3. Not unloaded from the transporting vehicle, and
4. Placed outside the lines indicated on the plans or limits set by the Engineer, and
5. Remain on hand after completion of the Contract

Where Contract Plans, drawings, reference drawings or other Contract specifications indicate a minimum dimension (e.g., 2 inch minimum depth of asphalt concrete overlays), no payment for exceeding the minimum dimension shall be allowed, except when payment is based on weight or volume the Engineer may approve up to a five (5) percent increase based either on the Contract bid amount, or theoretical weight or volume based on the Contract drawings and specifications, whichever is less.

**9-1.6 Payment** - No compensation will be allowed for hauling and disposing of rejected materials. Full compensation for all expenses involved in conforming to the requirements for measuring and weighing materials shall be considered as included in the unit prices bid for the materials being measured or weighed and no additional allowance will be made therefore.

**9-2 SCOPE OF PAYMENT** - The Contractor shall accept the compensation for all work to be performed under the Contract, as provided in the Contract Bid Proposal, as full compensation for all costs, overhead, profit and expenses in connection therewith, including but not limited to; furnishing all labor, materials, tools, equipment, bonds, licenses, permits, fees,

insurance, supervision, testing, corrections, repairs, restoration of existing improvements, construction surveys, and incidentals, and for doing all the work involved in completing each item as shown and specified.

The Contract bid prices shall also include full compensation for:

- 1) Any loss or damage arising from the nature of the work or from the action of the elements, and
- 2) Any unforeseen difficulties which may be encountered during the prosecution of the work, and
- 3) All risks of every description connected with the prosecution of the work, and
- 4) All expenses incurred in consequence of the suspension or discontinuance of the work as provided in the Contract, and
- 5) Completing the work in accordance with the Contract Documents.

Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective or damaged work or material.

Principal features of the work to be included under the various payment items are noted. Work not specifically listed in the "Bid Proposal" shall be included in the prices bid under the items to which such work is applicable. Quantities of work to be paid shall be based on the number or amount of the item acceptably installed complete in place, as measured by the Engineer. When payment limits are designated on the plans, such limits shall control and no separate measurement or payment will be made beyond such limits for the items. No compensation will be made in case of loss of anticipated profits. Increased or decreased work involving Contract Change Orders or supplemental agreements will be paid for as provided in such Contract Change Orders or agreements.

Payments for materials and supplies stored or not installed in their final positions will not be allowed.

Unless provided for differently, references to *Contractor's cost, borne by Contractor, paid by Contractor* and phrases of like import shall be deemed to be accompanied with the phrase "at no additional cost to the City".

It is mutually agreed between the parties hereto that no certificate given or payments made under this Contract, except the final certificate of payment, shall be conclusive evidence of the performance of this Contract, either wholly or in part.

Progress payments or other payments shall not be construed as an acceptance of any defective work or improper materials. The Contractor hereby agrees that the payment of the final amount due under the Contract shall release the City, Engineer, and their authorized representatives from any and all claims or liability or compensation on account of work performed under this Contract or any alterations thereof.

All work necessary to complete the project as shown on the plans but not specifically set forth as a pay item in the Bid Proposal Form shall be considered a subsidiary obligation of Contractor and all costs in connection therewith shall be included in the various contract bid items of work and no additional compensation shall be allowed therefore.

All estimated quantities stipulated in the Bidders Proposal or other Contract Documents are approximate and are to be used only as a basis for estimating the probable cost of the work and for the purpose of comparing the bids submitted for the work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefor.

This section shall apply to all bid items as if repeated and contained separately therein.

### **9-3 EXTRA WORK**

**9-3.1 General** - New or unforeseen work will be classed as "extra work" when the Engineer determines that it is not covered by Contract unit prices or stipulated unit prices.

**9-3.2 Payment** - When the price for the extra work cannot be agreed upon, the city will pay for the extra work by force account, as provided herein.

**9-3.3 Daily Reports by Contractor** - At the beginning of the following day, the Contractor shall submit a daily report to the Engineer, on forms approved by the City, together with applicable delivery tickets, listing all labor, materials and

equipment involved for that day, and for other authorized services and expenditures. An attempt shall be made to reconcile reports daily, and it shall be signed by the Engineer and the Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points that cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by subcontractors or others shall be submitted through the prime contractor. The Daily Reports shall show the following:

- 1) **Labor** - The report shall show names of workers, classification and hours worked.
- 2) **Material** - The report shall describe and list quantities of materials used.
- 3) **Equipment** - The report shall show type of equipment, size, identification number and hours of operation, including loading and transportation, if applicable.
- 4) **Other Services and Expenditures** - Other services and expenditures shall be described in such detail as the City may require.

#### **9-3.4 Basis for Establishing Costs**

**9-3.4.1 Labor** - The costs of labor will be the actual cost for wages, not to exceed that prevailing locally for each craft or type of workman as of the project bid opening date, plus costs. The use of labor classification that would increase the extra work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

**9-3.4.2 Labor Surcharge** - The labor surcharge compensates the Contractor for statutory payroll items stipulated by various governmental agencies. The four items included are Workers' Compensation, Social Security, State Unemployment and Federal Unemployment taxes. The general rate is an average of the job classifications common to public projects.

**9-3.4.3 Materials** - The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the job site in the quantities involved, plus sales tax, freight and delivery.

The City reserves the right to approve materials and sources of supply, or to supply materials to the Contractor if necessary for the progress of the work. No charge of markup shall be applied to any material provided by the City.

**9-3.4.4 Tool and Equipment Rental** - No payment will be made for the use of tools that are not listed on the current State of California equipment Rental Rate List.

The rates to be used in determining equipment rental costs shall not exceed those determined using the latest State of California Department of Transportation Manual of Equipment Rental Rates as of the project bid opening date.

The rental rates paid shall be considered complete compensation to include the cost of readying the equipment, fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, tune-up, and maintenance of any kind, depreciation, storage, insurance and all incidentals.

Necessary loading and transportation costs for equipment used on the extra work shall be included.

If equipment is used intermittently and, when not in use, could be returned to its rental source and less expense to the City than holding it at the work site; it shall be returned, unless the Contractor elects to keep it at the work site at no expense to the City.

All equipment shall be acceptable to the Engineer, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and manufacturer's approved modifications shall be used to

classify equipment and it shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

The reported rental time for equipment already at the job site shall be the duration of its use on the extra work, commencing at the time it is first put into actual operation on the extra work, plus the time required to move it from its previous location and back or to a closer location, or to move it from its normal storage location (Contractor's Yard) and return it, whichever is the least total distance.

**9-3.4.5 Other Items** - The City may authorize other items that may be required on the extra work. Such items include labor, services, material and equipment which are different in their nature from those required for the work specified in the Contract and which are of a type not ordinarily available from the Contractor or any of his subcontractors.

Invoices covering all such items in detail shall be submitted with the request for payment.

**9-3.4.6 Invoices** - Vendor's invoices for material, equipment rental, and other expenditures shall be submitted with the request for payment. If the request for payment is not substantiated by invoices or other documentation, the City may establish the cost of the item involved at the lowest price that was current at the time of the work involved.

**9-3.4.7 Mark-Up** - Mark-up and surcharge percentages shall be in accordance with Section 9-1.04, "Force Account," of the State Specifications. The mark-up shall be considered to include compensation for all administrative costs of any kind, including bonding and overhead costs of all forms, that are not costs of labor but related to labor used in the performance of the Work.

#### **9-4 PROGRESS PAYMENTS**

**9-4.1 General** - Submittal, review and payment of monthly progress payments to the Contract shall conform to Section 7107, Section 20104.4 and Section 22300 of the Public Contract Code and as specified herein.

The Contractor shall, once each month, prepare an estimate of the total amount of work done. The form used for the progress payment shall be approved by the Engineer.

**9-4.2 Engineer's Review Approval** - The Engineer will review each pay request as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request. If the pay request is determined to be improper it shall be returned to the Contractor within seven (7) days, after receipt. If returned the pay request shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper. This process may be repeated until a proper pay request has been submitted to the Engineer.

If no action is taken by the Engineer on an initial monthly pay request or a revised monthly pay request within the seven (7) day time period, the pay request shall be considered proper. A proper pay request shall be paid by the City within thirty (30) days following its receipt.

**9-4.3 Retention** - The City shall retain five percent (5%) of such estimated value of the work done from progress payments.

**9-4.4 Payment Amount** - The amount of each progress payment to the Contractor shall be the total estimated value of work completed less:

1. All previous payments, and
2. An amount equal to all outstanding claims
3. The required 5% retention (unless approved securities for the retention have been posted with the City), and
4. All other sums to be kept or retained under the provisions of the Contract, and

The City may withhold, or on account of later discovered evidence, nullify all or part of any certification made to the Contractor by the City as to the amount determined to be due the Contractor, to such extent and period of time only as may be necessary to protect the City from loss on account of:

1. Defective work not remedied, or
2. Claims filed or reasonable evidence indicating probable filing, or
3. Failure to properly pay Subcontractors or for material or labor, or
4. **“Stop Notices”** filed pursuant to Section 3179 et. Seq. of the Civil Code, or
5. Reasonable doubt that the work can be completed for the balance then unpaid, or
6. Damage to City (including liquidated damages), another Contractor, or third party.

No monthly estimate or progress payment shall be required to be made when in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the Contract; or when the total value of the work done since the last estimate amounts to less than one thousand dollars (\$1000). City shall make no payments to Contractor unless Contractor submits a properly-documented Progress Payment request.

**9-4.5 Substitute Securities** - At the request and expense of the Contractor, pursuant to Section 10263 of the Public Contract Code, the City will make payment of funds for the required five (5) percent retention, provided the Contractor deposits in escrow with a bank acceptable to the City, securities eligible for the investment of State funds as provided for in Section 16430 of the Government Code or bank certificates of deposit, subject to the following:

1. The Contractor shall bear the expense of the City and the escrow agent, either the City Treasurer or the bank, in connection with the escrow deposit made.
2. Securities or certificates of deposit to be placed in escrow shall be subject to approval of the City unless otherwise permitted by the escrow agreement, shall be of a value of at least 110 percent of the amounts of retention to be paid to the Contractor pursuant to this section.
3. The Contractor shall enter into an escrow agreement satisfactory to the City. The escrow agreement shall be substantially similar to the “Escrow Agreement for Security Deposits In Lieu of Retention” in Section 10263 of the Public Contract Code, incorporated herein by reference.
4. The Contractor shall obtain the written consent of the surety to such agreement.

**9-4.6 Prompt Progress Payment to Subcontractors** – A prime contractor or subcontractor shall pay any subcontractor not less than 10 days after receipt of each progress payment in accordance with Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors, unless a longer period of time is agreed to in writing by the parties. Any delay or postponement of payment over 30 days may take place only for good cause and with the city’s prior written approval. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanction, and other remedies of that section. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or non-payment by the prime contractor, deficient subcontract performance, or non-compliance by a subcontractor.

**9-5 DELIVERED MATERIAL** - When provided for in the Contract Special Provisions, subject to limitations and conditions therein, the cost of materials and equipment delivered but not incorporated in the work may be included in the progress estimate, upon approval by the Engineer.

**9-6 FINAL PAY QUANTITIES** - When the estimated quantity for specific portion of the work is designated on the plans as a “final pay” quantity, the estimated quantity shall be the final quantity for which payment will be made. Adjustments to final pay quantities will be made only in the event the dimensions of the work covered by the pay item in the bid proposal is changed or eliminated.

**9-7 ACCEPTANCE, FINAL ESTIMATE AND FINAL PAYMENT** -

**9-7.1 General** - Whenever the Contractor in the opinion of the Engineer shall have completed his Contract; the Engineer shall so certify in writing to the City Council and shall make a final estimate of the amount of the work done by the Contractor and also the total value of his work according to the terms of the Contract.

The Contractor shall indicate his approval of the final estimate by signing the final pay estimate, or file a written statement of claims no later than the close of business day of the thirtieth day after receiving the Engineers proposed final pay estimate. Should the thirtieth day fall on a Saturday, Sunday or City Holiday, then receipt of the written approval or statement of claims by the Engineer shall not be later than close of business of the next business day.

**9-7.2 Claims** - No claim shall be considered that is not included in the written statement of claims. No claim shall be considered unless Contractor has complied with the notice and protest requirements under the provisions of Section 8-5, "Right of Way Delay"; Section 8-6.3, "Protest Procedure"; Section 8-9, "Time of Completion"; Section 8-10, "Liquidated Damages"; and Section 10, "Protests and Claims by Contractor" of these General Provisions.

**9-7.3 No Outstanding Contractor's Claims** - Within thirty (30) calendar days following the Engineer's approval of the final estimate the City Council will accept the work as complete and authorize the filing of the "Notice of Completion". If the Contractor files no claims, within the specified thirty (30) day period, the estimate shall be deemed accepted by the Contractor and the Engineer will issue a final pay estimate in writing in accordance with the final estimate.

On the Contractor's approval, or if the Contractor files no claim within the specified thirty (30) day period; the final payment less a five (5) percent retention will be made to the Contractor. The payment due the Contractor for work performed and materials furnished shall be determined from the final measurements made by the Engineer and the unit prices bid by the Contractor, including such extra work as may have been properly authorized. All prior partial quantities and payments shall be subject to correction in the final payment and no payment shall be construed to be an acceptance of any defective work or improper materials.

The final estimate and payment thereon shall be conclusive and binding against both parties to the Contract on all questions relating to the amount of work done and the compensation payable, except in the event of a clerical error verified by the Engineer.

From the total amount of the work, a deduction of a five-(5) percent retention will be made. From the remainder will be deducted all amounts due to the City from the Contractor in accordance with the terms of the Contract. The balance due the Contractor will be paid no sooner than thirty-(30) calendar days, nor later than sixty (60) calendar days, following Council acceptance.

**9-7.4 Contractor Claims Outstanding** - If the Contractor within the specified period of thirty (30) days files claims, the Engineer will issue a semifinal estimate of undisputed amounts to the Contractor and within thirty (30) days thereafter the City will pay the sum so found to be due. The semifinal estimate and payment thereon shall be conclusive and binding against both parties to the Contract on all questions relating to the amount of work done and the compensation payable therefor, except insofar as affected by the claims filed within the time and in the manner required hereunder, and except in the event of a clerical error verified by the Engineer.

Upon final determination of the claims, the Engineer will issue the final pay estimate in writing. The City Council shall accept the work as complete within thirty-(30) calendar days thereafter and authorize the filing of the "Notice of Completion". The final estimate shall be conclusive and binding against both parties to the Contract on all questions relating to the amount of the work done and compensation payable therefor, except in the event of a clerical error verified by the Engineer.