

WEST VIRGINIA DIVISION OF HIGHWAYS

ADMINISTRATIVE OPERATING PROCEDURES

SECTION TITLE: HIGHWAY OPERATIONS

CHAPTER TITLE: MATERIALS PURCHASING - CONTRACT ADMINISTRATION

Republished: 11/1/2000

Effective: 1/20/82

- I. INTRODUCTION
- II. DUTIES AND RESPONSIBILITIES
- III. STONE AND AGGREGATES
- IV. ABRASIVES
- V. WINTER GRADE ASPHALTIC PATCHING MIXTURE
- VI. RADIO MAINTENANCE CONTRACT RESPONSIBILITIES
- VII. HOT-LAID BITUMINOUS CONCRETE

SECTION TITLE: HIGHWAY OPERATIONS

CHAPTER TITLE: MATERIALS PURCHASING - CONTRACT ADMINISTRATION

I. **INTRODUCTION**

Republished: 11/1/2000

Effective: 1/20/82

The purpose of this chapter is to provide procedures for the administration of purchase order contracts for maintenance materials by District personnel.

II. **DUTIES AND RESPONSIBILITIES**

The DOH has the responsibility of writing clear, concise specifications and purchase requisitions, and administering specifications and purchase order contracts in a fair and equitable manner. The field administration of materials purchases from statewide and District-wide purchase order contracts in the responsibility of the District.

A. **HIGHWAY OPERATIONS DIVISION RESPONSIBILITIES**

1. Work with Information Services Division to develop Highway Operations Procedures for Materials Purchasing - Contract Administration.
2. Provide training to District personnel in the interpretation of purchase order contracts and the proper implementation of these Procedures.
3. Work with Transportation Auditing Division (Procedures Compliance Section) and the Procurement Section of Finance Division to monitor field activities relative to Materials Purchasing - Contract Administration.

B. DISTRICT RESPONSIBILITIES

Republished: 11/1/2000

Effective: 1/20/82

1. The District Administrator has the ultimate responsibility for field activities relative to the procurement of highway maintenance materials and the field administration of purchase order contracts for highway maintenance materials.
2. The District Administrator shall designate the Assistant District Administrator - Maintenance to act in his or her behalf to perform the day-to-day management functions that are necessary to assure that materials purchasing and the administration of purchase order contracts are performed in a proper and prescribed manner.
3. The Assistant District Administrator - Maintenance shall designate the Office Planning/Design Engineer/Supervisor to act in his or her behalf to perform the day-to-day functions that are essential to Materials Purchasing - Contract Administration. These functions shall include the following:
 - a. Writing District-wide requisitions for purchase order contracts;
 - b. Writing Blanket Purchase Orders (*i.e.* State Contract Purchase Orders - SCO's) to secure maintenance materials from statewide and District-wide purchase order contracts;
 - c. Evaluate bid information to determine low bidder for SCO awards; and
 - d. Perform other functions necessary to the acquisition of maintenance materials and the field administration of statewide and District-wide purchase order contracts.
4. The Office Planning/Design Engineer/Supervisor shall attend training sessions relative to Materials Purchasing - Contract Administration at the time and place designated by Highway Operations Division. The Assistant District Administrator - Maintenance may also attend the training sessions at his or her option.

5. The District Administrator shall direct the District Comptroller to make available to the Office Planning/Design Engineer/Supervisor, on a regular basis, all materials inventory data considered by the Office Planning/Design Engineer/Supervisor to be necessary to maintain materials purchasing in a current status.

III. **STONE AND AGGREGATES**

Republished: 11/1/2000

Effective: 1/20/82

A. **READING THE CONTRACT DOCUMENT**

The most important requirement in administering materials purchase order contracts is to carefully read the contract and its associated specifications, and understand the responsibilities of both the contractor and the DOH. The contractor has the primary responsibility of supplying to the DOH a service involving materials, labor, and equipment at the time, place and location, and under the conditions set out in the contract document and the governing specifications. The DOH has the primary responsibility of assuring that the foregoing is accomplished in the specified manner. The DOH also has the responsibility of administering the contract in a fair and equitable manner. See Section 1 of the Purchase Order Contract document for governing specifications.

B. **PURCHASE REQUIREMENTS**

The purchase order contract for stone and aggregates is an open-end contract based on an estimated quantity of materials. District personnel must issue SCO's for specific quantities of materials based on each SCO requirement.

C. DETERMINING SCO QUANTITIES

Republished: 11/1/2000

Effective: 1/20/82

SCO's will be written to satisfy two basic requirements:

1. Contractors have bid firm prices to deliver estimated quantities of materials to designated storage sites. Field organizations must write SCO's for specific quantities to be delivered to those sites. These SCO's should be written as soon as practicable after receipt of the Purchase Order Contract. This allows better scheduling opportunities in the production process and lowers the contractor's production cost. It also improves the delivery schedule of ordered materials.
2. Contractors have also bid firm prices for materials FOB contractor's storage site as well as a ton-mile haul cost. Under this contract provision, field organizations may initiate SCO's at any time to meet specific needs.

D. DETERMINING LOW BID (CONTRACTOR HAUL)

Effective: 4/5/82

For materials to be purchased FOB contractor's storage site and delivered by contractor, field personnel must determine low bid for each SCO that is issued for specific quantities to be delivered to a specified site. Low bid is based on the lowest unit cost per cubic yard to secure and deliver the materials to the specified site. Lowest unit cost can be conveniently determined on Form SM-102, Aggregate - Low Bid Computation (see Forms Section).

The computations to be performed on Form SM-102 to derive unit costs are self-explanatory. Unit bid prices are inserted in columns (3), (6), and (7). Type of material is inserted in column (4). The above information, as well as that required in columns (1) and (2), is contained in the Purchase Order Contract and may be placed on Form SM-102 as soon as the contracts are received in the field. When an SCO is written for a specific quantity of material to be delivered to a designated site, then the contract item can be inserted in column (4), the haul distance will be measured and inserted in column (8) and the "Tons Per Cubic Yard Factor" can be taken from the Purchase Order Contract and inserted in column (5). The values to be inserted in columns (9) and (10) are computed values and the formula for each computation is shown on the Form.

When all computations are complete, the contractor with the lowest unit cost in column (10) should be awarded the SCO, FOB the designated delivery site.

Form SM-102 should be distributed as follows:

1. The original will accompany the SCO to the Procurement Section of Finance Division, and
2. A copy will be retained at the District Office.

E. DETERMINING LOW BID (DOH HAUL)

Republished: 11/1/2000

Effective: 1/20/82

For materials to be purchased FOB contractor's storage site and delivered by the DOH, field personnel must determine low bid for each SCO that is issued for specific quantities to be picked up at contractor's storage site and delivered by the DOH to a specified site. Low bid is still based on the lowest unit cost per cubic yard to secure and deliver the material to the specified site. In this instance, however, the DOH will use its haul cost of \$0.90 for first ton-mile and \$0.11 for each additional ton-mile in columns (6) and (7) instead of contractor's bid values. When all computations are complete, the contractor with the lowest unit cost in column (10) should be awarded the SCO for material only, FOB contractor's storage site.

Form SM-102 should be distributed as follows:

1. The original will accompany the SCO to the Procurement Section of Finance Division, and
2. A copy will be retained at the District Office.

F. AWARDING THE STATE CONTRACT PURCHASE ORDER

As noted in section "III.D.", the contractor with the lowest unit cost for delivering material FOB Highways' designated site should be awarded the SCO. In determining the unit cost, however, the haul distance from the contractor's storage site to the designated delivery site is measured and used in the unit cost computation. Prior to awarding the SCO, therefore, the contractor should agree with the haul distance used in the computations and should then use it as the basis for invoicing haul costs.

G. ADJUSTING SCALE WEIGHTS FOR EXCESS MOISTURE

Republished: 11/1/2000

Effective: 1/20/82

In the event visual inspection of aggregates upon delivery indicates excess or unusual moisture beyond that normally expected, field personnel should sample and test the aggregate for excess moisture content (see Contract Administration Division's Procedures Manual MP700.00.22 for test method). The contractor will be notified by telephone when the sampling is performed. A moisture sample will represent all materials delivered on the date of sampling that appears to have excess or unusual moisture. Scale weights will be adjusted by removing excess moisture to determine pay quantities.

A test report will be developed by the District, which will show the following information as a minimum:

1. Date of sampling,
2. Place of sampling,
3. Purchase Order Contract number and SCO number,
4. Percent of excess moisture,
5. Quantity of material shipped that appeared to have excess or unusual moisture and is represented by the test result reported in "4.", above.

The original test report will be retained at the District Office and a copy of the report will be provided to the contractor prior to his or her preparation of an invoice involving the affected materials. When the invoice and supporting weight tickets are received in the District Office, they shall be carefully reviewed to ascertain that the did, in fact, invoice for adjusted scale weights as specified in the Purchase Order Contract.

IV. **ABRASIVES**

Republished: 11/1/2000

Effective: 1/20/82

A. **READING THE CONTRACT DOCUMENT**

The most important requirement in administering materials purchase order contracts is to carefully read the contract and its associated specifications, and understand the responsibilities of both the contractor and the DOH. The contractor has the primary responsibility of supplying to the DOH a service involving materials, labor, and equipment at the time, place and location, and under the conditions set out in the contract document and the governing specifications. The DOH has the primary responsibility of assuring that the foregoing is accomplished in the specified manner. The DOH also has the responsibility of administering the contract in a fair and equitable manner. See Section 1 of the Purchase Order Contract document for governing specifications.

B. **PURCHASE PROVISIONS**

Effective: 2/20/82

Abrasives may be secured from the State Contract Purchase Order for abrasives or from the State Contract Purchase Order for aggregates. From the abrasives contract, cinders for use as abrasives may be purchased. From the aggregate contract, either abrasives or AASHTO size No. 8 or No. 9 aggregate may be purchased.

When abrasives for snow and ice control are to be purchased, bids on both the abrasive contracts and the aggregate contracts should be evaluated to assure that suitable material is purchased at the lowest possible cost.

C. **DETERMINING LOW BID FOR MATERIAL F.O.B. HIGHWAYS' DESIGNATED STORAGE SITE**

Republished: 11/1/2000

Effective: 2/20/82

For certain Districts, contractors have bid firm prices to deliver cinders to designated DOH storage sites. When an SCO is to be written for cinders to be delivered to these sites, an evaluation shall be made of the cost to deliver alternate materials to the same sites. These alternate materials may be abrasives or AASHTO No. 8 or No. 9 aggregates on the aggregate contracts. The procedure for determining the cost of delivering these alternate materials to the designated DOH storage sites is contained in section "III." of this chapter. If an alternate material can be delivered to the designated DOH storage site at a lower cost than that bid for cinders, then the SCO should be written for the alternate material.

D. **DETERMINING LOW BID FOR MATERIAL F.O.B. CONTRACTOR'S STORAGE SITE**

For certain Districts, contractors have bid firm prices for cinders F.O.B. the contractor's storage site. When an SCO is to be written for cinders to be purchased F.O.B. contractor's storage site, an evaluation shall be made of the cost to purchase alternate materials. The alternate materials may be abrasives or AASHTO No. 8 or No. 9 aggregates on the aggregate contract.

If cinders are to be purchased F.O.B. the contractor's storage site and delivered in DOH trucks to a designated storage site, then the cost of cinders at the designated storage site should be determined. This can be achieved with the aid of Form SM-102, Aggregate - Low Bid Computation. A copy of the form is displayed in the Forms Section of this Volume.

The computations to be performed on Form SM-102 to derive unit costs are self-explanatory. The following information is recorded in columns 1 through 10.

- Column (1) - Contract number
- Column (2) - Contractor's name and storage site
- Column (3) - Unit cost of contract item
- Column (4) - Type of material (cinders) and contract item
- Column (5) - Tons per cubic yard factor

The above information can be taken from the contract documents as soon as they are received in the field and placed on Form SM-102.

- Columns (6) and (7) - Haul cost for first ton-mile and each additional ton-mile

Highways' haul cost for cinders is \$0.95 for the first ton-mile and \$0.12 for each additional ton-mile. These values should be inserted in columns (6) and (7) and this may be done at the same time data is entered in columns (1) through (5).

- Column (8) - Total miles is the measured miles from the contractor's storage site to the location where the DOH wants to store the material. This information would be developed at the time an SCO is to be written.
- Columns (9) and (10) - Haul Cost per ton and Unit Cost F.O.B. Delivery Site. The values to be inserted in columns (9) and (10) are computed using the equations contained on the form.

In order to compare the cost of cinders with alternate materials, computation on Form SM-102 must also be made for abrasives and AASHTO No. 8 and No. 9 aggregates on the aggregate contract. The procedure for computing the cost for abrasives and aggregates is similar to that described in the preceding paragraphs, and is written in section "III." of this Chapter. When all computations are complete, the contractor who has the lowest unit cost in column (10) should be awarded the SCO for the particular material that is involved in the lowest unit cost computation. An SCO for cinders should be awarded for a unit price F.O.B. contractor's storage site. An SCO for an alternate material may be awarded for a unit price F.O.B. contractor's storage site or DOH designated storage site, depending on who provides the transportation; i.e., the DOH or the contractor.

Form SM-102 should be distributed as follows:

1. The original will accompany the SCO to the Procurement Section of Finance Division, and
2. A copy will be retained at the District Office.

E. ADJUSTING SCALE WEIGHTS FOR EXCESS MOISTURE

Republished: 11/1/2000

Effective: 1/20/82

In the event visual inspection of cinders upon delivery indicates excess or unusual moisture beyond that normally expected, field personnel should sample and test the cinders for excess moisture content (see Contract Administration Division Procedures Manual MP700.00.22 for test method). The contractor will be notified by telephone when the sampling is performed. A moisture sample will represent all materials delivered in an interval of time during which they appear to have excess or unusual moisture. In the event more than one moisture sample is taken in an interval of time during which the material appears to have excess or unusual moisture, then the sampler will note the quantity of material represented by each sample. Scale weights will be adjusted by removing excess moisture to determine pay quantities.

A test report will be developed by the District, which will show the following information as a minimum:

1. Date of sampling,
2. Place of sampling,
3. Purchase Order Contract number and SCO number,
4. Percent of excess moisture, and
5. Quantity of material shipped which appeared to have excess or unusual moisture and is represented by the test result reported in "4.", above.

The original test report will be retained at the District Office and a copy of the report will be provided to the contractor prior to the contractor's preparation of an invoice involving the affected materials. When the invoice and supporting weight tickets are received in the District Office, they shall be carefully reviewed to ascertain that the contractor did, in fact, invoice for adjusted scale weights as specified in the Purchase Order Contract.

V. **WINTER GRADE ASPHALTIC PATCHING MIXTURE**

Republished: 11/1/2000

Effective: 1/20/82

A. **READING THE CONTRACT DOCUMENT**

The most important requirement in administering materials purchase order contracts is to carefully read the contract and its associated specifications, and understand the responsibilities of both the contractor and the DOH. The contractor has the primary responsibility of supplying materials to the DOH at the time, place and location, and under the conditions set out in the contract document and the governing specifications. The DOH has the primary responsibility of assuring that the foregoing is accomplished in the specified manner. The DOH also has the responsibility of administering the contract in a fair and equitable manner (see Section 1 of purchase order contract for governing specifications).

B. **PURCHASE REQUIREMENTS**

The purchase order contract for Winter Grade Asphaltic Patching Mixture is an open-end contract for estimated quantities of materials. District personnel must issue SCO's for specific quantities. SCO quantities should represent the best estimate of anticipated need. All materials delivered in conformance with the purchase order contract and SCO instructions incur an obligation for payment upon delivery. This obligation to pay applies to materials delivered F.O.B. vendor's plant as well as to materials delivered F.O.B. a designated storage site.

C. WHEN TO ISSUE SCO

Republished: 11/1/2000

Effective: 1/20/82

The SCO should be written as soon as practicable after receipt of the purchase order contract. This allows better scheduling opportunities in the production process and lowers the contractor's production cost. It also improves the delivery schedule of ordered materials.

D. NEED TO SPECIFY MIX

A Special Provision for Section 412 is contained in, and made part of, the purchase order contract. This Special Provision provides for two mixes: Mix #1 and Mix #2. In the SCO, the mix numbers and the quantities relative to each should be specified. (See Standard Specifications for Road & Bridges Manual, Article 412.2.1 in Special Provision.)

E. TEST FOR ASPHALT STRIPPING

A prescribed program of sampling and testing is conducted during the production process. In the interval of time between production and the use of material, additional sampling and testing may be required to determine the extent of asphalt stripping from the aggregate particles. The governing specification allows a maximum of 5% uncoated aggregate particles while the material is stockpiled during the year following production. If there is a question regarding conformance, take a sample and send it to Contract Administration Division. (See Standard Specifications for Road & Bridges Manual, Article 412.5 in Special Provision.)

B. HIGHWAY OPERATIONS DIVISION RESPONSIBILITIES

Republished: 11/1/2000

Effective: 4/5/82

1. The Communications Manager will determine if the contracted service will be utilized for the repairs and will contact the service shop presently under contract. A date and time will be established for the repair work to be performed by a representative from the service shop.
2. Highway Operations Division will prepare an Accounting Distribution Code Form with a Transmittal Letter for processing the invoice.
3. To improve efficiency and to eliminate any possible confusion resulting from lack of communication between the DOH and the contracted service shop, the Communications Manager will, on occasion, meet with a representative of the contracted service shop to discuss the service being provided and, if necessary, ways to improve any deficient areas.

VII. HOT-LAID BITUMINOUS CONCRETE

Republished: 11/1/2000

Effective: 6/23/88

A. READING THE CONTRACT DOCUMENT

The most important requirement in administering materials purchase order contracts for Hot Laid Bituminous Concrete is to carefully read the contract and associated specifications, to understand the responsibilities of both the contractor and the DOH, and to determine which contractor is the most cost effective for the specific application. The contractor has the primary responsibility of supplying to the DOH a service involving materials, labor, and equipment at the time, place and location, and under the conditions set out in the contract document and the governing specifications. The DOH has the primary responsibility of assuring that the foregoing is accomplished in the specified manner. The DOH also has the responsibility of administering the contract in a fair and equitable manner. See the Purchase Order Contract document for governing specifications.

B. PURCHASE REQUIREMENTS

The purchase order contract for Hot-Laid Bituminous Concrete is an open-end purchase order contract based on an estimated quantity of materials. District personnel must issue SCO's for specific quantities of materials based on each job's requirement.

C. DETERMINING SCO QUANTITIES (CONTRACTOR LAYDOWN)

Each job requiring a large quantity of Hot-Laid Bituminous Concrete (HLBC) will normally be secured with one SCO. When several small jobs are to be performed in the same vicinity, they should be accumulated into a single project and secured with one SCO. This practice will eliminate many mobilization charges that would otherwise unfairly accrue to the DOH.

Hot-Laid Bituminous Concrete Project Cost (Form SM-100) is designed and required for use along with the Contract Acceptance Purchase Order in determining the most cost effective contractor. (An example of Form SM-100 is included at the end of this chapter.) All contractors holding valid contracts for the District will be listed on the Form SM-100.

D. **DETERMINING SCO QUANTITIES (DOH LAYDOWN)**

Republished: 11/1/2000

Effective: 6/23/88

When the DOH is performing the laydown operation, the paving job will have the same job description that would be provided if a contractor was performing the laydown. The paving may be performed to correct slide damage or flood damage, to do spot paving or continuous paving on a particular segment of highway, or to meet other paving requirements. Each of these paving operations would be considered a project because they use substantial quantities of Hot-Laid Bituminous Concrete and they would each have well-defined geographic (project) boundaries. These project boundaries shall be clearly stipulated and an SCO initiated to provide the required materials. A complete Hot-Laid Bituminous Concrete Project Cost (Form SM-100) is required.

When the DOH is using minor amounts of Hot-Laid Bituminous Concrete in one general area, such as for patching, etc., the District Office will initiate a blanket SCO for no more than 500 tons. As additional small quantities of HLBC are required in this general area, they may be obtained, using this blanket SCO, as long as the total quantity obtained does not exceed the blanket SCO quantity (500 tons). When the quantity for which this blanket SCO was written is reached, the District Office will initiate a new blanket SCO.

E. DETERMINING LOW BID (CONTRACTOR LAYDOWN)

Republished: 11/1/2000

Effective: 6/23/88

Bid evaluation is based on the total cost to perform the work specified in the SCO. Total cost includes the following cost elements.

- Materials
- Haul
- Laydown
- Cleaning and Sweeping (if required)
- Bituminous Material for Track or Prime (if required)
- Mobilization (if applicable)
- Off Season Opening (if required)

The total SCO (or project) cost can be conveniently determined on the Form SM-100 (Hot-Laid Bituminous Concrete Project Cost).

Form SM-100 should be completed as follows: Unit bid values are inserted in spaces indicated by (a) on the example Form SM-100. This can be accomplished as soon as the Purchase Order Contracts are received. When an SCO is being prepared for a specific project, the desired quantity figures should be inserted into the applicable spaces indicated by (b) on the example Form SM-100 and the haul distance should be measured and inserted into the space indicated by (c). Project costs for Items A through E and G through M, as applicable, are calculated and inserted into spaces indicated by (d) on the example Form SM-100. The Project (SCO) Total for each contractor should be computed and inserted into spaces indicated by (e) on the example Form SM-100.

1. The quantities to be used for Item G and Item H shall be the total of all HLBC material included in Item A through E on the project.

2. The additional haul mileage (c) used in Item G shall be the actual measured haul distance to the center of the project from the contractors plant minus one mile.

F. DETERMINING LOW BID (DOH LAYDOWN)

Republished: 11/1/2000

Effective: 6/23/88

When the DOH is performing the laydown operation on a paving project, it must determine the contractor who can supply Hot-Laid Bituminous Concrete at the lowest cost F.O.B. project site.

If it is desired to have the contractor haul, the computation of low bid is the same as described in section "E.", except that only material and haul costs are involved. When all computations are complete, the contractor with the lowest project (SCO) total costs should be awarded the SCO for material delivered F.O.B. project site.

If the DOH wishes to haul the Hot-Laid Bituminous Concrete, the computation of low bid still involves material and haul cost but, in this instance, the DOH will use \$1.00 for the first ton-mile and \$0.10 for each additional ton-mile on Form SM-100. When all computations are complete, the contractor with the lowest project (SCO) total cost should be awarded the SCO for material only, F.O.B. contractor's plant.

1. If an SCO is written expressly for a laydown project, then Form SM-100 should be distributed as previously specified in section "E".

2. If an SCO is not written expressly for a laydown project, but the material is secured from a blanket SCO, then the District Administrator shall take those steps necessary to assure that material shall be procured from the contracted vendor that results in the lowest cost to the DOH. Factors to be considered shall include, but not be limited to, bid price of material, haul cost, and availability of desired material. It is not required that Form SM-100 be submitted.

G. **AWARDING THE STATE CONTRACT PURCHASE ORDER**

Republished: 11/1/2000

Effective: 6/23/88

As noted in sections "E." and "F.", the contractor with the lowest total project cost should be awarded the SCO. In determining the project cost, however, the haul distance from the contractor's plant to center of project is measured and used in project cost computations. Prior to awarding the SCO, therefore, the contractor should agree with the haul distance used in the computations and should then use it as the basis for billing haul cost.