

1601 SOURCE OF SUPPLY AND QUALITY

The Contractor shall provide Materials for the Work from sources capable of producing and delivering uniformly acceptable Materials in accordance with 1503, "Conformity with Contract Documents," and the Progress Schedule. The Contractor shall notify the Engineer of intended sources of supply after award of the Contract and before Material delivery or use to allow the Engineer to inspect and test the Materials before delivery or use.

Unless otherwise specified, the Contractor shall provide new Materials of the specified grade and type or kind.

The Contractor shall not use multiple Material sources to provide one kind or class of Material, unless otherwise approved by the Engineer. If the Engineer approves the use of Material from more than once source, the Engineer will set the conditions for each source change.

The Contractor shall make plant alterations or provide Materials from alternative sources capable of producing uniformly acceptable Material as approved by the Engineer if, during production, the Engineer finds either of the following:

- (1) Supply sources of previously approved Materials do not produce uniformly acceptable Materials, or
- (2) Conditions require extraordinary inspection and testing by the Department to prevent delivery of unacceptable Material.

1602 NATURAL MATERIAL SOURCES

The Department may list possible sources of natural Materials in the Contract, but does not warrant or imply the availability of sufficient quantities of acceptable Material in those sources. The Department may also list the same sources as a possible source for other existing or future contracts. The Contractor shall acknowledge the Department's inability to ascertain from samples the limits for an entire deposit and shall consider variations as usual and expected. The Contractor shall determine the equipment and Work necessary to produce a Material meeting the Contract requirements.

The Contractor has the right to take Materials from those sources that the Contract lists as specified in the lease. The Contractor shall notify the Engineer in writing prior to Approval of the Contract if the Contractor intends to obtain Material

from those sources. The Contractor shall not remove any Material from the source until giving a 14 calendar day written notice.

For all sources where the Department owns the Material or where the Contractor elects to obtain Material under the terms of a Department lease or permit, the Contractor shall remove the Material in accordance with the following requirements and conditions:

- (1) The Contractor shall procure Material from the portion of the source as directed by the Engineer. The Engineer may reject unacceptable portions of the source.
- (2) The contractor must use the Material exclusively on the Contract Project.
- (3) The Contractor will perform clearing and grubbing as necessary, in accordance with 2101, "Clearing and Grubbing," at no additional cost to the Department.
- (4) If others are operating concurrently in a pit used as a source of Materials for the Project, the Contractor must cooperate in accordance with 1505, "Cooperation by Contractors."
- (5) If the Contractor's operations necessitate the relocation, adjustment, rearrangement, or other Work on impacted drainage facilities or utility properties, the Contractor shall perform this Work at no additional cost the Department.
- (6) The Contractor shall blend Materials from various layers and areas within the source as directed by the Engineer, even to the extent of blending Materials from the top of the deposit with those from the bottom of the deposit.
- (7) Within the areas owned or leased by the Department, the Contractor shall spread or stockpile the strippings and rejected Materials as directed by the Engineer.
- (8) If the Contract includes a Material price table(s), the Contractor can only produce the Materials listed in the table(s). The Contractor shall not use Material suitable for the production of Class 5 or Class 6 base aggregate as borrow Material unless otherwise approved by the Engineer in writing.
- (9) If the Contract does not contain a separate "Rock Price," the Contractor may not screen off a coarse fraction (+No. 4) of Material and blend it with Material from a different source to produce an aggregate product (the Contractor may not use rock from a source and blend it with sand from a different source to produce concrete, bituminous, or base, etc.). If the Contract contains a separate "Rock Price," the Contractor may screen off Material and will pay the indicated price for the rock fraction. In addition, the Contractor may not produce riprap, unless there is a separate "Rock Price" for riprap included in the Contract.

- (10) After removing the Material and after completing the Work, the Contractor shall leave the site in a condition acceptable to the Engineer. The Contractor shall level waste piles, trim slopes and pit bottoms, replace the stripping, and perform other cleanup work at no additional cost to the Department, unless otherwise approved by the Engineer.

The Department will provide the Contractor with statements showing the quantities of Material removed and the payment due. The Department will require full reimbursement before making final payment on the Contract.

1603 MATERIALS: SPECIFICATIONS, SAMPLES, TESTS, AND ACCEPTANCE

1603.1 SPECIFICATIONS

The Department will sample, test, and inspect all Materials in accordance with the Contract at any time before being permanently incorporated in the Work. The Department will approve or reject Materials based on the results of this sampling, testing, and inspection. The material requirements that describe material sampling, testing and inspection are normally referenced in Division II (construction details), the Plans, or the Special Provisions. In the absence of a specific material reference, the governing material specifications, in order of precedence, will be Division III (materials), AASHTO, ASTM, and the applicable industry standard.

Unless otherwise required, if the Contract cites specifications, standards, methods, tests, or practices from outside associations, societies, or governmental agencies, the Department is referring to the versions of these references that are current at the date of the Advertisement for Bids. If the Contract refers to other procedures, practices, or allowances established or approved by the Department, the Department will refer to the versions of these references that are current at the date of the Advertisement for Bids. The Department and Contractor may mutually agree to update the referenced provisions to the version current at the time of application.

1603.2 SAMPLING AND TESTING

Refer to the Schedule of Materials Control for sampling and testing of Materials on State and Federal-aid Projects. The Schedule of Materials Control sets the size of Material samples and the rate of testing. The Schedule of Materials Control does not set Contract requirements for the Material. The Schedule of Materials Control is included with the Proposal Package.

The Contractor shall provide all required samples at no additional cost to the Department and shall provide such facilities and assistance as the Engineer directs for collecting and forwarding samples. If required by the Engineer, the Contractor shall submit representative preliminary samples to the Engineer in accordance with the specified methods, for examination and testing. The Contractor shall label submitted preliminary samples with the following information:

- (1) Contractor's name,
- (2) Project number,
- (3) The material source,
- (4) Supplier's name, and
- (5) Where the material fits into the Work.

For soil and aggregate samples, the Contractor shall provide the following additional information:

- (1) The legal description of the property where the samples were taken, and
- (2) Pit numbers for single source bituminous and concrete aggregate products.

The Department will provide special instructions for sampling upon request from the Contractor.

1603.3 CERTIFICATE OF COMPLIANCE

The Engineer may accept industry standardized products by a Certificate of Compliance in lieu of the required sampling and testing, subject to the following:

- (1) The Certificate of Compliance must state that the provided Material meets the specification requirements, identify the Specification number, and include the Project number.
- (2) Attach the Certificate of Compliance to the invoice, weigh bill, or other shipping document, and identify the supplier, manufacturer, product, and quantities covered.
- (3) Deliver a copy of the Certificate of Compliance with the shipment of the covered Material.
- (4) Provide certified test reports to the Materials Engineer if requested. Keep certified test results on file with the supplier and available to the Engineer for inspection upon request.

The Department may require samples and test the Material for compliance regardless of prior certification by the supplier.

For items that require a Certificate of Compliance, the Department will withhold 100 percent of the Contract Unit Price of Work until the Contractor submits the Certificate of Compliance to the Engineer.

1603.4 ACCEPTANCE

Department approval of preliminary samples will not constitute acceptance of the Material represented. The Department will only consider the Materials actually delivered to the Project for acceptance. The Department will base Material acceptance or rejection on the results of the tests and inspections made by the Engineer. The Engineer will make final inspection and acceptance of Material at the Project.

The Department will not allow use of Material that must meet definite Contract requirements until completion of all required acceptance inspections and tests show the Material complies with the Contract requirements.

Pending determination of test results, the Contractor may use Material having a satisfactory record of compliance with the test requirements at the Contractor's risk, with the understanding that the Department will apply the provisions of 1503, "Conformity with Contract Documents," and 1512, "Unacceptable and Unauthorized Work," if the material fails to meet the Contract requirements subsequent to placement.

1604 PLANT INSPECTION — COMMERCIAL FACILITY

1604.1 GENERAL

The Engineer may perform plant inspection and test Material at the source before delivery to determine compliance with those test requirements and process controls required by the Contract during production. The Engineer may retest Material at the site regardless of approvals given before final inspection and acceptance. The Engineer will base Material acceptance on compliance with Contract requirements at the time of incorporation in the Work.

The Engineer may retest Material after delivery and will reject Material that fails to meet the Contract requirements.

The cost of facilities and assistance provided by the Contractor required for inspection of Materials at the source will be considered as part of the production costs and are included in the Contract Unit Prices applying to the work involved.

1604.2 INSPECTION PROCEDURES

The Contractor shall meet the following conditions when the Engineer performs a plant inspection:

- (1) At least 2 weeks before starting production, notify the Engineer of the date and place of production to allow for arrangements for the plant inspection;
- (2) Notify the Engineer of the production schedule and other related information concerning inspection arrangements;
- (3) In partnership with the producer, cooperate with and assist the Engineer in the inspection. The Department's inspectors will not handle the Materials being inspected;
- (4) Arrange, store, and handle the Material as directed by the inspector;
- (5) Provide the Engineer with office space as defined in 1604.3, "Requirements For Facilities," at commercial production plants and other facilities, tools deemed necessary for inspection, and free entry to the plant locations where manufacturing or production occur; and
- (6) Provide and maintain safety measures as approved by the Engineer. The Engineer will terminate inspection at the source if conditions are deemed hazardous by the Engineer.

1604.3 REQUIREMENTS FOR FACILITIES

Commercial plants producing bituminous mixture, structural concrete, or graded aggregates for state Projects shall have in-plant inspection facilities meeting the following requirements:

- (1) Floor area of at least 120 sq. ft [11 sq. m], with weatherproof exterior construction, adequate natural lighting, and convenient accessibility.
- (2) Equipped with at least one suitable table or workbench, at least one stool and one chair, an approved fire extinguisher for use intended, and a suitable storage cabinet with lock.
- (3) Provided with adequate electric lighting and electrical outlets, adequate heating system, conveniently located sanitary facilities, and convenient access to running water supply.
- (4) Furnished with at least a 3-burner natural gas or electric stove for sample drying and with effective forced-air ventilation.
- (5) Provided with an electrically powered mechanical sieving apparatus to determine particle size distribution of fine aggregate (less than No. 4 [4.75 mm] sieve) capable of accommodating six full height No. 200 [75 μ m] round sieves with pan and cover provided by the Department. The Engineer will approve the apparatus after verifying that the sieving meets the requirements of AASHTO T 27.

The producer shall make the in-plant inspection facilities available to the Engineer before beginning production. The producer shall maintain the in-plant inspection facilities until the termination of production, at no additional cost to the

Department. If the facilities do not meet the requirements specified in this subsection, the Contractor shall provide an equivalent field laboratory unit at the plant site as directed by the Engineer and at no additional cost to the Department.

1605 SUBSTITUTE MATERIALS

When the Department classifies Material to be incorporated in the Work according to size, strength, type, or other design classification for separate units, courses, sections, or installations, the intent is to specify the acceptable level of compliance, quality, or service. The Contractor may provide Material exceeding the specified class, quality, service life, or other Contract requirements to facilitate the Work.

The Contractor may use substitutions only as approved by the Engineer, at no additional cost to the Department. The Engineer shall establish the revised basis for acceptance in writing.

1606 STORAGE OF MATERIALS

The Contractor shall store Materials in a manner that preserves the quality and fitness of the Materials for the Work. The Department may inspect the stored Materials before use in the Work, even though the Department may have approved the Materials before storage. The Contractor shall store Materials to facilitate inspection.

The Contractor may use portions of the Project Site approved by the Engineer for storing Materials and for placing plant and Equipment. The Contractor shall provide needed additional space at no additional cost to the Department. The Contractor shall restore all portions of the Project Site used for storage or operations to acceptable condition, at no additional cost to the Department, before the Department will grant final acceptance of the Project.

The Contractor shall not use private property for storing Materials or Equipment without written permission of the owner or lessee. The Contractor shall provide the Engineer evidence of the written permission to use private property upon request.

The Department will only allow stockpiling of Materials within the Project Site that the Contractor will incorporate into the Work. This Specification applies to manufactured and natural Materials, including Materials stockpiled for crushing.

1607 HANDLING MATERIALS

The Contractor shall handle Materials to preserve quality and fitness for the Work. The Contractor shall transport Materials in vehicles constructed to prevent loss of Material after loading and measuring. The Contractor shall ensure the quantities of Materials as loaded are the same as the quantities received on the Project.

The Contractor shall use methods and Equipment to load and haul bulk Materials that prevent contamination or loss of Material after measurement and acceptance for the Work.

1608 UNACCEPTABLE MATERIALS

The Department considers Materials that do not meet the Contract requirements before being incorporated into the Work as unacceptable. The Engineer will reject unacceptable Material. The Contractor shall remove unacceptable Material from the Project, unless otherwise directed by the Engineer as allowed by 1603, "Materials: Specifications, Samples, Tests, and Acceptance."

If the Contractor corrects defects in Material that the Department determined was unacceptable and the Contractor brings the Materials into compliance with the Contract requirements, the Contractor may use the Material if authorized by the Engineer.

1609 DEPARTMENT-PROVIDED MATERIAL

The Department will deliver or make available Department-provided Material at the locations shown on the Plans or in the Special Provisions. The Contract Unit Price for the relevant Contract Items includes the costs of handling, transporting, and placing the Materials.

The Contractor shall take responsibility for Department-provided Material after the Department delivers or makes the Material available to the Contractor. The Department will deduct from moneys due the Contractor for shortages, deficiencies, or damage to the Material occurring after taking possession and for demurrage charges.