

SECTION 106

CONTROL OF MATERIALS

106.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

- A. The Contractor shall furnish all materials required to complete the work, except materials that are designated in the Special Provisions to be furnished by the Contracting Agency as specified in Subsection [106.11](#), "Contracting Agency Furnished Materials."
- B. No materials or supplies under this contract shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage, conditional sale contract or other security interest, or other agreement by which an interest is retained by the seller. The Contractor warrants that Contractor has good title to all materials and supplies used by the Contractor in the work, free from all liens, claims, or encumbrances.
- C. Only materials conforming to the requirements of the specifications shall be incorporated in the work except as provided in Subsection [105.03](#), "Conformity With Plans and Specifications."
- D. The materials furnished and used shall be new, except as may be provided elsewhere in these specifications, on the plans or in the Special Provisions. The materials shall be manufactured, handled, and used in a workmanlike manner to ensure completed work in accordance with the plans and specifications.
- E. The Contractor shall furnish the Engineer a list of the Contractor's sources of materials. The list shall be submitted to the Engineer prior to any official "Notice to Proceed" and in sufficient time to permit proper inspecting and testing of materials to be furnished from such listed sources in advance of their use.
- F. The listings of materials that are posted on the Interagency Quality Assurance Committee (IQAC) web page are automatically considered a qualified source. However, this does not remove the responsibility of the Contractor to provide inspection and testing on the project as specified herein. The address for the IQAC webpage is:
http://www.clarkcountynv.gov/Depts/public_works/construction_mgmt/Pages/Materials.aspx
- G. If it is found after trial that sources of supply for previously approved materials do not produce uniform and satisfactory products, or if the product from any source proves unacceptable at any time, which includes IQAC listed materials, the Contractor shall furnish satisfactory materials from other sources.
- H. The Contractor shall furnish without charge such samples as may be required by the Engineer. The primary inspection and testing shall be made by the Contractor or the Contractor's designated representative, with Engineer oversight. However, it is understood that such inspections and tests, if made at any point other than the point of incorporation in the work, in no way shall be considered as a guarantee of acceptance of such materials nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made.
- I. Manufacturer's warranties, guarantees, instruction sheets, and parts lists, which are furnished with certain articles or materials incorporated in the work, shall be delivered to the Engineer before acceptance of the completed contract.
- J. Contractor's reports and records of inspections made and tests performed shall be submitted to the Engineer as required in these specifications. The Engineer's inspection

and testing records, when available at the site of the work, may be examined by the Contractor.

106.02 LOCAL MATERIALS

- A. Local material is defined as rock, sand, gravel, earth, or other mineral material, other than local borrow or selected material, obtained or produced from sources in the vicinity of the work specifically for use on the project. Local material does not include materials obtained from established commercial sources.
- B. Local materials shall be furnished by the Contractor from any source the Contractor may elect, except when a mandatory source is designated in the Special Provisions.
- C. Aggregates for base, surface, and concrete may be the products of approved commercial producers, provided they meet specification requirements.
- D. The furnishing of local materials from any source is subject to the provisions of Subsection [102.05](#), "Examination of Plans, Specifications, Contract Documents, and Site of Work," and Subsection [106.03](#), "Possible Local Material Sources." Material deposits shall not be excavated at locations where their resulting scars will present an unsightly appearance from any street or highway, unless such excavation is approved in writing by the Engineer.
- E. Generally, local material deposits will not be approved if located within 1,000 feet of right-of-way line. In any case the Contractor's pit operations shall not encroach within 25 feet of the right-of-way. Payment will not be made on material obtained in violation of these provisions.
- F. The Contractor shall, at no additional cost to the Contracting Agency, make any and all arrangements necessary for hauling over local, public, or private roads or property from any source. Full compensation for furnishing all labor, materials, tools, equipment, and incidentals; for doing all the work involved in conforming to the provisions in this subsection; and for furnishing and producing materials from any source shall be considered as included in the price paid for the contract item of work involving such material and no additional compensation will be allowed.
- G. The Contractor or the Contractor's representative shall attest to the content of the submitted materials that have been reviewed against the Contract Documents, and that the materials are in compliance thereto. Submitted materials that are to be evaluated as "Or Equal" or "Substitution" shall include sufficient information to enable the Engineer to make the determination for approval.

106.03 POSSIBLE LOCAL MATERIAL SOURCES

- A. If the Contractor desires to use materials from local sources other than those described in Subsection [102.05](#), "Examination of Plans, Specifications, Contract Documents, and Site of Work," the Contractor shall, at no additional cost to the Contracting Agency, acquire the necessary right to take material and shall obtain all other necessary permits and approvals and shall comply with all the requirements and stipulations in effect by other governing agencies having jurisdiction over the area, and pay all costs involved, including any which may result from an increase in length of haul. All costs of exploring and developing, including inspection and testing, such alternate sources shall be borne by the Contractor and the use of material from such sources will not be permitted until representative samples taken by the Engineer have been approved and written authority issued for the use thereof.

- B. The Contractor's attention is especially directed to Title 43, "Code of Federal Regulations," Part 23, "Surface Exploration, Mining and Reclamation of Lands," which pertains to all exploration, developing, and obtaining material from said alternate deposits located upon land under the jurisdiction of the Bureau of Land Management.
- C. Where the Contracting Agency has made arrangements with owners of land in the vicinity of a project for obtaining material from an owner's property, such arrangements are made solely for the purpose of providing all bidders an equal opportunity to obtain material from such property. Bidders or contractors may, upon written request, inspect the documents evidencing such arrangements between property owners and the Contracting Agency. The Contractor may, if the Contractor so elects, exercise any rights that have been obtained, which may be exercised by a Contractor under such arrangements, subject to and upon the conditions hereinafter set forth.
- D. Such arrangements are not a part of the contract and the Contracting Agency assumes no responsibility to the bidder or Contractor whatsoever in respect to the Contracting Agency's arrangements made with the property owner to obtain materials therefrom and that the Contractor shall assume all risks in connection with the use of such property, and there is no warranty or guarantee, either expressed or implied, as to the quality or quantity of materials that can be obtained or produced from such property or the type or extent of processing that may be required in order to produce material conforming to the requirements of the specifications.
- E. In those instances in which the Contracting Agency has designated optional or mandatory local material sources in the Special Provisions, this may include the documents setting forth the arrangements made with some of the property owners for obtaining material from such owners' properties. The inclusion of such documents therein shall not in any respect operate as a waiver of any of the provisions in this section concerning said documents.
- F. The bidder or Contractor is cautioned to make such independent investigation and examination as the bidder or Contractor deems necessary to satisfy bidder or Contractor as to the quality and quantity of materials available from such property, the type and extent of processing that may be required in order to produce material conforming to the requirements of the specifications and the rights, duties, and obligations acquired or undertaken under such an arrangement with the property owner.
- G. Notwithstanding that the Contractor may elect to obtain materials from any such property owner's property, no material may be obtained from such property unless the Contractor has first either:
 - 1. Executed a document that will guarantee to hold such owner harmless from all claims for injury to persons or damage to property resulting from the Contractor's operations on the property owner's premises and also agreed to conform to all other provisions set forth in the arrangement made between the Contracting Agency and the property owner. Said document will be prepared by the Engineer for execution by the Contractor, or
 - 2. Entered into an agreement with the owner of the material source on any terms mutually agreeable to the owner and the Contractor, provided that the Contractor shall furnish to the Engineer a release, in a form satisfactory to the Engineer, executed by the owner, relieving the Contracting Agency of any and all obligations under the Contracting Agency's arrangements with the owner.
- H. If the Contractor elects to obtain material under G.1, the use of such site shall be subject to the terms, conditions, and limitations of the arrangement made between the property

- owner and the Contracting Agency and the Contractor shall pay such charges as are provided for in the arrangement made by the Contracting Agency with the property owner.
- I. If the Contractor elects to obtain material under G.2, the Contractor shall pay such charges as are provided for in the agreement between the owner and the Contractor.
 - J. Unless otherwise provided and before execution of the contract, the Contractor shall submit written evidence that the owner of the material source is satisfied that the Contractor has satisfactorily complied with the provisions of either (a), the arrangement between the Contracting Agency and the owner, or (b), the agreement between the owner and the Contractor as the case may be.
 - K. Where the Contracting Agency has obtained the right to remove materials from lands owned or controlled by the U.S. Government, by withdrawal or otherwise, and these areas are set forth as optional or mandatory local material sources in the Special Provisions, the Contractor on the project may enter and remove materials for use on subject project only without further permission. The Contractor may not enter on or remove materials from any other areas withdrawn or otherwise obtained by the Contracting Agency from the U.S. Government which are not specifically designated for the project without prior written approval from the Contracting Agency.
 - L. Should the Contractor enter upon any of the areas withdrawn or otherwise obtained by the Contracting Agency from the U.S. Government, it shall be the Contractor's responsibility to determine the rights of others in the area. The Contractor shall not encroach on easements of others without their written permission and shall assume the responsibility for any damages due to the Contractor's entering said area. In addition, the Contractor shall be bound by the terms, conditions, and reservations contained in the approved application for withdrawal.
 - M. Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and producing specified materials from possible local material sources, including the construction of any access roads or fences and any clearing, grubbing, and stripping of material sources, and all processing of whatever nature and extent required, shall be considered as included in the price paid for the contract item of work involving such material and no additional compensation will be allowed.

106.04 SAMPLES AND TESTS

- A. Sampling for final acceptance of materials will be as required in the appropriate specifications sections and in general shall comply with the AASHTO requirements, where applicable, and with the following sampling criteria:
 - 1. Aggregates for roadmix bituminous mixtures (including base or surface) will be sampled after the material has been placed on the roadbed and processed and prior to adding the bituminous binder.
 - 2. Aggregate for plantmix bituminous open-graded will be sampled from the laydown machine, or by "belt-cut" sample at the production plant at the Engineer's discretion.
 - 3. Aggregate for screenings will be sampled from the loaded truck just prior to placing, or by "belt-cut" sample at the production plant at the Engineer's discretion.
 - 4. Aggregate for plantmix bituminous mixtures (base or surface) will be sampled for acceptance behind the paver. Samples for plasticity tests will be taken at the bins.

5. Sampling of bituminous materials, intended for use in prime, tack or seal coats, surface treatments, and base, binder, or surface course mixtures shall be done after the bituminous material has arrived at job destination and before or at the time of unloading the materials.
 - a. Two samples shall be taken from each railroad tank car or truck transport of material by the Contractor or the Contractor's designated representative under the observation of and complying with the requirements of AASHTO T 40 in a manner approved by the Engineer. Where delivery is made in smaller hauling units than those cited above such as a distributor, or where the contents of a storage tank are sampled, the required 2 samples shall be taken to represent a maximum of 10,000 gallons. The Contractor shall take the samples during the established job working hours, unless arrangements are made for a representative of the Contracting Agency to witness the taking of the samples at another time.
 - b. All sampling devices and sample containers shall be furnished by the Contractor. Immediately after filling the sample container, it shall be tightly sealed, properly marked for identification, and presented to the Engineer.
 - c. One of the 2 samples, taken from each load, shall be submitted to the Contractor's Material Source laboratory for testing and the other sample retained by the Engineer. If the first sample tested complies with requirements, the second may be discarded.
 - d. Where less than 80 percent of the asphalt deliveries are used on the project, samples shall be taken just prior to delivery to the mixer. Samples shall be taken for every 25 tons of asphalt delivered to the project.
6. Tests for the aforementioned materials produced under conditions other than contemplated herein shall be taken at the time and place deemed by the Engineer to be most appropriate.

106.05 CERTIFICATE OF COMPLIANCE

- A. The Engineer may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance stating that the materials involved comply in all respects with the requirements of the specifications. The certificates shall be signed by the manufacturer of the material or the fabricator of assembled materials. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the certificate with attached applicable test results for that lot in accordance with the specification section.
- B. All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the work which conforms to the requirements of the plans and specifications and any such material not conforming to such requirements will be subject to rejection whether in place or not.
- C. The Contracting Agency reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance.
- D. The form of the Certificate of Compliance and its disposition shall be as directed by the Engineer.

106.06 CITED SPECIFICATIONS

- A. The Nevada Department of Transportation has developed test methods for testing the quality of materials and work. These test methods are identified by the prefix Nev. followed by the serial number. Copies of individual test methods are available at the Materials Division, Nevada Department of Transportation, Carson City, Nevada.
- B. Whenever a reference is made in the specifications to a test method by Nev. or Cal. number, it shall mean the test method in effect on the date of the advertisement for bid.
- C. Whenever a reference is made in the specifications to a specification or test designation either of ASTM International, AASHTO, federal specifications, or any other recognized national organization, and the number or other identification accompanying the test designation representing the year of adoption or latest revision of the test is omitted, it shall mean the test method in effect on the date of advertisement for bid.
- D. When requested by the Engineer, the Contractor shall furnish, without charge, samples of all materials entering into the work, and no material shall be used prior to approval by the Engineer, except as provided in Subsection [106.05](#), "Certificate of Compliance." Samples of material from local sources shall be taken by or in the presence of the Engineer; otherwise, the samples will not be considered for testing.

106.07 PLANT INSPECTION

- A. The Engineer may inspect the production of material or the manufacture of products at the source of supply. The Contractor and material producer shall assure the Engineer of their cooperation and assistance to perform plant inspection prior to production of materials for the project. The Engineer or the Engineer's authorized representative shall have free entry at all times to such parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection.
- B. It is understood that the Contracting Agency reserves the right to retest all materials prior to incorporation into the work which have been tested and accepted at the source of supply after the same have been delivered and to reject all materials which, when retested, do not meet the requirements of these specifications, or the requirements of the contract documents.

106.08 STORAGE OF MATERIALS

- A. Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary by the Engineer, materials shall be stored in waterproof buildings, placed on wooden platforms or other hard, clean surfaces, and not on the ground, and shall be covered when directed.
- B. Stored materials, even though approved for use before storage, may be inspected prior to their use in the work, and materials shall meet the requirements of the specifications at the time of this proposed use. Stored materials shall be located so as to facilitate their prompt inspection.
- C. Upon approval of the Engineer, that portion of the right-of-way not required for public travel may be used for storage purposes and for placing of the Contractor's plant and equipment, but any additional space required therefor shall be provided by the Contractor at no additional cost to the Contracting Agency. Private or public property shall not be used for storage purposes without written permission of the owner or lessee.

- D. All storage sites shall be restored to their original condition by the Contractor at no additional cost to the Contracting Agency. This shall not apply to the stripping and storing of top soil or to other material salvaged from the work or specifically prescribed under the specifications. Construction materials may not be stored in streets, roads, or highways for more than 5 days after unloading. All materials or equipment not installed or used in the construction within 5 days after unloading shall be stored elsewhere by the Contractor at no additional cost to the Contracting Agency unless the Contractor is authorized additional storage time.
- E. Construction equipment shall not be stored at the work site before its actual use on the work nor for more than 5 days after it is no longer needed on the work unless the Contractor is authorized additional storage time. Time necessary for repair or assembly of equipment may be authorized by the Engineer.
- F. Excavated material, except that which is to be used as backfill in the adjacent trench, may not be stored in public streets, roads, or highways unless otherwise permitted. After placing backfill, all excess material shall be removed immediately from the site.

106.09 HANDLING MATERIALS

- A. All materials shall be handled in such manner as to preserve their quality and fitness for the work.
- B. Aggregates shall be transported from the storage site to the work in tight vehicles so constructed as to prevent loss or segregation of materials after loading and measuring in order that there may be no inconsistencies in the quantities of materials intended for incorporation in the work as loaded, and the quantities as actually received at the place of operation.

106.10 GUIDANCE ANALYSIS OF NONCOMPLYING MATERIALS

- A. In the event of a non-compliance of a produced or placed material, the Contractor is responsible for submitting a recommendation report to the Engineer for the determination of the basis of acceptance of the material by the Engineer based on AASHTO R-9, this section, and/or other industry practices as approved by the Engineer. This report shall be performed by a Nevada Professional Engineer. The receiving of the report by the Engineer does not imply acceptance of the report recommendations.
- B. The policy of the Engineer is that a project shall have been constructed "... in reasonably close conformity with the approved plans and specifications..." to be eligible for full payment of the material and installation. However, there will be instances when test results, as a result of the above noted variability may indicate apparent nonconformance to the specification limits, yet the construction product may be acceptable for the use intended at full or reduced pay. In these cases, an analysis of the materials and/or materials test results will be necessary by the Contractor through a professional engineer before payment is made.
- C. As a general guidance and unless otherwise stipulated in other specification sections or contract Special Provisions, if more than 10 percent of the test values for any construction product are outside of the applicable specifications, there may be a question of "reasonably close conformity." In these cases, an analysis of the test values should be made to determine the magnitude and extent of the nonconforming materials.

106.11 CONTRACTING AGENCY FURNISHED MATERIAL

- A. The Contractor shall furnish all materials required to complete the work, except those specified to be furnished by the Contracting Agency. Material furnished by the Contracting Agency will be delivered or made available to the Contractor at the points specified in the Special Provisions.
- B. The cost of handling and placing all materials after they are furnished to the Contractor shall be considered as included in the contract price for the item in connection with which they are used.
- C. The Contractor will be held responsible for all material furnished to the Contractor, and deductions will be made from any money due to the Contractor to make good any shortages and deficiencies, from any cause whatsoever, and for any damage which may occur after such delivery and for any demurrage charges. The responsibility by the Contractor includes any project inspection and testing that is required in these specifications.