Sharps Station Road Bridge Replacement and Brightwell Road Culvert Repair

BID ADDENDUM

Addendum #1
September 21, 2022

**** Bid Closing Date, Time & Place Remains Unchanged: Friday**
September 30, 2022, 5:00 pm Local Time, County Clerk's Office, Room #116**

Bidders shall note these changes to the above referenced bid and incorporate them in their submittal. **Bidders shall attach a signed copy of this addendum to their bid.** No questions were received in written form by Platte County Public Works. This addendum addresses the time of placing asphalt, if necessary, and completion date for both projects:

1. MoDOT Type 5 aggregate will be used for the roadway if the asphalt plants are not in operation due to winter season. All roadway surface maintenance will be the responsibility of the Contractor until asphalt will be placed.

2. See attached specs for "Item MO-209, Crushed Stone Aggregate Base Course".

3. Contractor shall return as early as practicable in spring of 2023 to prepare the roadway sub-base and install asphalt base and surface materials.

4. When work is suspended due to winter weather, the calendar day count will stop upon approval by the Engineer. The count will resume in 2023 when the Engineer deems conditions are suitable for placement of asphalt.

5. If the Contractor chooses to use this scenario, the bridge and or the culvert must be open and available to the traveling public during the work suspension period.

6. The notice to proceed will be established with the low bidder at the preconstruction meeting with a completion date of both projects by July 1, 2023.

ACKNOWLEDGEMENT OF ADDENDUM #1

The undersigned Bidder hereby certifies that the changes set forth in this Addendum No. 1 have been incorporated in their bid.

Firm _____ Date _____

Signed _____

ITEM MO-209 CRUSHED AGGREGATE BASE COURSE

DESCRIPTION

209.1.1 This work shall consist of furnishing and placing one or more courses of crushed aggregate base on a prepared subgrade in accordance with these specifications and in conformity with the lines, grades, thicknesses and typical cross sections shown on the plans. Aggregate base shall meet the requirements of the 2004 Missouri Standard Specification for Highway Construction (MSSHC), Section 304 - Aggregate Base Course. **All construction methods, testing, and acceptance criteria shall be in accordance with the standards included within this Item MO-209.**

MATERIALS

209-2.1 AGGREGATE. All materials for aggregate base shall conform to the requirements of the 2004 (MSSHC), Section 304, for **Type 5 Aggregate.**

The ledge stone from which the aggregate base will be produced has to have source approval from the Missouri Department of Transportation (MoDOT). Prior to use of materials, the contractor shall submit the current MoDOT source approval letter to the Engineer for the materials proposed for use during construction. Source approval granted for "all types of highway construction" (Product Code 1005CACP) constitutes approval for all uses. Source approval granted for "all types except PCCP" (Product Code 1005CACM) comprises approval for all uses except Portland cement concrete pavement. Source approval obtained for "all types except PCCP & PCCM" (Product Code 1002CAAC) is considered to be approval for all uses except Portland cement concrete.

The contractor shall submit certified test reports to the Engineer for the gradation of the aggregate base. The certification shall show the appropriate AASHTO test for the material, the test results, and a statement that the material passed or failed. The aggregate shall be sampled and tested for gradation using the following procedures:

1. Sampling Aggregates. Sampling shall be in accordance with AASHTO T 2.

2. Sieve Analysis of Fine and Coarse Aggregate. The aggregate shall be tested in accordance with AASHTO T 27 and shall meet the gradation requirements of the MSSHC, Section 1007.

3. Material Passing No. 200 Sieve. The aggregate shall be tested in accordance with AASHTO T 11 and meet the requirements of the MSSHC, Section 1007.

In lieu of the above gradation testing requirements, the contractor may provide documentation from MoDOT (District Materials Office) indicating that the material meets specification requirements.

The Engineer may request samples for testing, prior to and during production, to verify the quality of the materials and to ensure conformance with the applicable specifications.

CONSTRUCTION METHODS

209-3.1 PREPARING UNDERLYING COURSE. The underlying course shall be checked and accepted by the Engineer before placing and spreading operations are started. Any ruts or soft yielding

places caused by improper drainage conditions, hauling, or any other cause shall be corrected at the Contractor's expense before the base course is placed thereon. Material shall not be placed on frozen subgrade.

209-3.2 MIXING. The aggregate shall be uniformly blended during crushing operations or mixed in a plant. The plant shall blend and mix the materials to meet the specifications and to secure the proper moisture content for compaction.

209-3.3 PLACING. The crushed aggregate base material shall be placed on the moistened subgrade in layers of uniform thickness with a mechanical spreader. The maximum depth of a compacted layer shall be 6 inches. If the total depth of the compacted material is more than 6 inches, it shall be constructed in two or more layers. In multi-layer construction, the base course shall be placed in approximately equal-depth layers.

The previously constructed layer should be cleaned of loose and foreign material prior to placing the next layer. The surface of the compacted material shall be kept moist until covered with the next layer.

209-3.4 COMPACTION. Immediately upon completion of the spreading operations, the crushed aggregate shall be thoroughly compacted. The number, type, and weight of rollers shall be sufficient to compact the material to the required density.

The moisture content of the material during placing operations shall not be below, nor more than 2 percentage points above, the optimum moisture content as determined by ASTM D 698.

209-3.5 ACCEPTANCE SAMPLING AND TESTING FOR DENSITY. Aggregate base course shall be accepted for density on a lot basis. A lot will consist of one day's production where it is not expected to exceed 2400 square yards. A lot will consist of one-half day's production where a day's production is expected to consist of between 2400 and 4800 square yards.

Each lot shall be divided into two equal sublots. One test shall be made for each sublot. Sampling locations will be determined by the Engineer on a random basis in accordance with statistical procedures contained in ASTM D 3665.

Each lot will be accepted for density when the field density is at least 100 percent of the maximum density of laboratory specimens prepared from samples of the base course material delivered to the job site. The specimens shall be compacted and tested in accordance with ASTM D 698. The in-place field density shall be determined in accordance with ASTM D 1556, D 2167 or ASTM D 6938. If the specified density is not attained, the entire lot shall be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached.

In lieu of the core method of field density determination, acceptance testing may be accomplished using a nuclear gage in accordance with ASTM D 6938 using the Direct Transmission Method. Calibration and operation of the gage shall be in accordance with the requirements of the manufacturer. The operator of the nuclear gage must show evidence of training and experience in the use of the instrument. The gage shall be standardized daily in accordance with ASTM D 6938.

If a nuclear gage is used for density determination, two random readings shall be made for each sublot.

209-3.6 FINISHING. The surface of the aggregate base course shall be finished by blading or with

automated equipment especially designed for this purpose.

In no case will the addition of thin layers of material be added to the top layer of base course to meet grade. If the elevation of the top layer is 1/2 inch or more below grade, the top layer of base shall be scarified to a depth of at least 3 inches, new material added, and the layer shall be blended and recompacted to bring it to grade. If the finished surface is above plan grade, it shall be cut back to grade and rerolled.

Type 5 aggregate base is intended to provide some drainage and shall not be segregated. Trimmed Type 5 aggregate base may not be reused until it is verified as meeting the required specifications. Base material contaminated to such an extent that it no longer complies with the specifications shall be removed and replaced with satisfactory material at the expense of the contractor.

209-3.7 SURFACE TOLERANCES. The finished surface shall not vary more than 3/8 inch when tested with a 16-foot straightedge applied parallel with or at right angles to the centerline. Any deviation in excess of this amount shall be corrected by the Contractor at the Contractor's expense.

209-3.8 THICKNESS CONTROL. The completed thickness of the base course shall be within 1/2 inch of the design thickness. Four determinations of thickness shall be made for each lot of material placed. The lot size shall be consistent with that specified in paragraph 3.5. Each lot shall be divided into four equal sublots. One test shall be made for each sublot. Sampling locations will be determined by the Engineer on a random basis in accordance with procedures contained in ASTM D 3665. Where the thickness is deficient by more than 1/2 inch, the Contractor shall correct such areas at no additional cost by excavating to the required depth and replacing with new material. Additional test holes may be required to identify the limits of deficient areas.

209-3.9 MAINTENANCE. The base course shall be maintained in a condition that will meet all specification requirements until the work is accepted. Equipment used in the construction of an adjoining section may be routed over completed portions of the base course, provided no damage results and provided that the equipment is routed over the full width of the base course to avoid rutting or uneven compaction.

If a prime coat is specified in the contract, the contractor will be required to apply the prime coat on any completed portion of the aggregate base as soon as practicable, or as otherwise specified. However, the contractor will not be permitted to apply prime if the moisture in the top 2 inches of the aggregate base exceeds the higher of either (1) the average of the optimum moisture as determined by the standard compaction test and the absorption of the plus No. 4 fraction, or (2) two-thirds of the optimum moisture as determined by the standard compaction test.

At the discretion of the engineer, proof rolling may be required by a loaded tandem axle truck on top of the aggregate base course to determine the level of stability. If the condition of the aggregate base course is not satisfactory, it should be given more time to cure or be reworked to put it into the proper condition for overlay.

METHOD OF MEASUREMENT

209-4.1 The quantity of crushed aggregate base course to be paid for will be determined by measurement of the number of square yards of material actually constructed and accepted by the Engineer as complying with the plans and specifications.

BASIS OF PAYMENT

209-5.1 Payment shall be made at the contract unit price per square yard for crushed aggregate base course. This price shall be full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, equipment tools, and incidentals necessary to complete the item.

Payment will be made under:

Item MO-209-5.1 [ ] Crushed Aggregate Base Course -- per square yard

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The Engineer shall specify the thickness of crushed aggregate base course shown in the plans.

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