Department of Transportation

Office of Project Development

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October 27, 2016

ADDENDUM NO. 1

RE: Item #2, November 2, 2016 Letting - P 0063(47)83, 014-352, PCN 04EJ, I4DL, Haakon, Jackson County - Cold Milling Asphalt Concrete & Asphalt Concrete Resurfacing

TO WHOM IT MAY CONCERN:

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

SPECIAL PROVISIONS: NO CHANGE

BID ITEM FILE: NO CHANGE

PLANS: Please destroy sheets 9 and 10 and replace with the enclosed sheets, dated 10/20/16.

Sheet 9: CLASS Q2R HOT MIXED ASPHALT CONCRETE note was revised and Note placement was adjusted.

Sheet 10: Note placement was adjusted.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: John Forman, Pierre Region Engineer
Dean VanDeWiele, Pierre Area Engineer

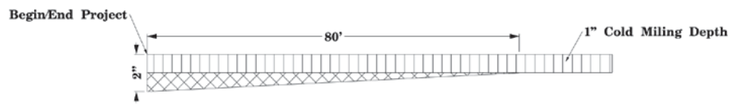
COLD MILLING ASPHALT CONCRETE TRANSITIONS

In order to construct the new surfacing flush with the existing Asphalt Concrete Pavement at begin/end project, railroad, and exception structure approach pavement limits it will be necessary to transition the depth of cold milling to the limits as shown in the layout below.

The surface shall be cold milled full roadway width.

It is estimated that 44.7 tons of cold milled material will be produced from the transitions on PCN 04EJ and 14.9 tons of cold milled material will be produced from the transitions on PCN i4DL.

All costs associated with this work shall be incidental to the contract unit price per square yard for “Cold Milling Asphalt Concrete”.



COLD MILLING ASPHALT CONCRETE

Cold milling asphalt concrete shall be done according to the typical sections. The depth or width of milling may need to be adjusted due to rutting, maintenance patches, or roadway irregularities. Additional asphalt concrete shall be milled in these areas to provide a uniform typical section from centerline to the edge of the finished shoulder. These areas may also include farm & field entrances and intersecting roads. Any additional costs associated with this additional cold milling shall be incidental to the contract unit price per square yard for “Cold Milling Asphalt Concrete”. No adjustments in quantity or price will be made.

The Contractor shall utilize some of the generated cold milled material to construct a 20:1 temporary on/off transition at the begin/end of the project or at locations deemed necessary by the Engineer where the milled surface meets existing surface to allow a safe traveled way for the traveling public. This material shall be removed once paving commences. The material shall become the property of the Contractor once it is determined by the Engineer that it is no longer needed on the project. All costs associated constructing and removing the transitions shall be incidental to the contract unit price per square yard for “Cold Milling Asphalt Concrete”.

After completion of the milling operation, the Contractor shall clean up and dispose of any remaining debris to the satisfaction of the Engineer.

The Los Angeles Abrasion Loss value on the aggregate used for the in place asphalt concrete was 26 percent. This value was obtained from testing during construction of the in place asphalt concrete.

PCN 04EJ:

Cold milling asphalt is estimated to produce 13,671.2 tons of RAP. An estimated 6,045.1 tons of RAP for Alternative A and 6,233.0 tons of RAP for Alternative B will be used on this project in the Class Q2R Hot Mixed Asphalt Concrete mixture. The Contractor is responsible to assure enough RAP is available for the Class Q2R Hot Mixed Asphalt Concrete. Excess salvaged asphalt concrete material shall be hauled and stockpiled at the site listed in the “Haul and Stockpile Granular Material” plan note.

PCN i4DL:

Cold milling asphalt is estimated to produce 251.0 tons of RAP. An estimated 104.9 tons of RAP for Alternative A and 108.3 tons of RAP for Alternative B will be used on this project in the Class Q2R Hot Mixed Asphalt Concrete mixture. The Contractor is responsible to assure enough RAP is available for the Class Q2R Hot Mixed Asphalt Concrete. Excess salvaged asphalt concrete material shall be hauled and stockpiled at the site listed in the “Haul and Stockpile Granular Material” plan note.

ASPHALT CONCRETE BLADE LAID

Included in the Estimate of Surfacing Quantities are 150 tons of Asphalt Concrete Blade Laid, 1.5 tons of Hydrated Lime, and 11.3 tons of PG 58-34 Asphalt Binder per mile and shall be tight bladed on the existing surface 24 feet wide prior to the overlay. A sufficient amount of material shall be kept in front of the blade to fill and level all joints, cracks and other surface irregularities.

Mineral Aggregate for tight bladed material shall use only the fine aggregate components combined in the same proportions as the Class Q2R Hot Mixed Asphalt Concrete mix. No quality testing will be done on any of the coarse aggregate (+No. 4 sieve) in this mix.

The Asphalt Concrete Blade Laid Lift shall be designed using an N_{design} Gyratory Compactive Effort of 65. The asphalt binder content shall be determined so that the air voids of Asphalt Concrete Blade Laid Lift are between 3.0% and 5.0%.

CLASS Q2R HOT MIXED ASPHALT CONCRETE

Mineral Aggregate:
Asphalt concrete aggregates shall consist of reclaimed asphalt pavement (RAP) and virgin aggregate.

Virgin mineral aggregate for Class Q2R Hot Mixed Asphalt Concrete- Alternate A shall conform to the requirements of Class Q2.

Virgin mineral aggregate for Class Q2R Hot Mixed Asphalt Concrete- Alternate B shall consist of a minimum of 80 percent crushed limestone ledgerock and shall conform to the requirements of Class Q2.

The Class Q2R Hot Mixed Asphalt Concrete shall include 20 percent RAP in the mixture. RAP shall be obtained from the material produced by cold milling on this project and may be used without further quality testing.

Mix Design Criteria:
Gyratory Controlled QC/QA Mix Design requirements for the Class Q2 Hot Mixed Asphalt Concrete – Alternate B shall conform to the requirements of Class Q2 except as modified by the following:

Voids in Mineral Aggregate (VMA):

	Minimum VMA (%):
Class Q2R	13.0

All remaining requirements for Class Q2 shall apply.

HAUL AND STOCKPILE GRANULAR MATERIAL

General:

Excess cold millings shall be hauled and stockpiled at the site located at the SD 34/SD 63 junction west of Hayes within the SW 1/4 of Section 20 T5N R25E in Stanley County, South Dakota. The Contractor shall have approval from the Engineer of the stockpile location prior to stockpiling the material within the aforementioned site.

The Contractor shall use a portable platform scale, stationary commercial scale, stationary commercial plant, portable plant scale, or a belt scale to control the weighing of the salvage material.

The RAP shall be crushed to meet the requirements of Section 884.2 C.1 prior to incorporation into the stockpile.

Screening or scalping of the RAP stockpile(s) will not be allowed.

All other costs for hauling and stockpiling the remaining cold milled material shall be incidental to the contract unit price per ton for “Haul and Stockpile Granular Material”.

04EJ:

Excess cold milled material estimated (for informational purposes only) for Alternative A at 7,626.1 tons and Alternative B at 7,438.2 tons.

I4DL:

Excess cold milled material estimated (for informational purposes only) for Alternative A at 146.1 tons and Alternative B at 142.7 tons.

ADDITIONAL QUANTITIES

Included in the Table of Additional Quantities for Alternative A are 100 tons of Class Q2R Hot Mixed Asphalt Concrete, 4.7 tons of PG 58-34 Asphalt Binder, and 1.0 ton of Hydrated Lime per mile and for Alternative B are 100 tons of Class Q2R Hot Mixed Asphalt Concrete, 4.2 tons of PG 58-34 Asphalt Binder, and 1.0 ton of Hydrated Lime per mile for spot leveling, strengthening and repair of the existing surface. Also included in the Table of Additional Quantities are 7.0 tons of SS-1h or CSS-1h Emulsified Asphalt for Tack for repair and leveling areas throughout the project. The aforementioned materials shall be placed as directed by the Engineer.

FLUSH SEAL

Application of Flush Seal shall be completed within 10 working days following completion of the asphalt concrete surfacing.

SAND FOR FLUSH SEAL

Sand for Flush Seal shall be furnished by the Contractor.

The spreading device placing the sand shall leave a gap of 6 inches each side of centerline, applicable lane lines and the edge-line to ensure a better bond between the pavement and the permanent pavement marking.

RUMBLE STRIP ROADWAY CLEANING

The Contractor shall be required to remove loose material from the driving surface and/or asphalt shoulders of the roadway. Loose material may be swept to the edge of shoulders and it shall be the Contractor's responsibility to ensure the loose material does not enter any vegetated areas and/or waterways.

All costs associated with the work shall be incidental to the contract unit price per mile for "Grind 12" Rumble Strip or Stripe in Asphalt Concrete".

IN-LANE RUMBLE STRIPS

The Contractor shall install in-lane rumble strips as per detail shown in the plans.

The in-lane rumble strips must be grooved into the asphalt concrete surfacing. Following installation, the in-lane rumble strips shall be flush sealed with SS-1h or CSS-1h Asphalt for Flush Seal. The in-lane rumble strips shall be completed prior to the flush seal and permanent pavement markings.

In the event the Flush Seal is eliminated from the contract, the Contractor will still be required to apply a Flush Seal to the newly installed in-lane rumble strips at the same rate as specified in this plan set.

Cost for installing the in-lane rumble strips shall be paid for at the contract unit price per foot for "Groove 6" Wide Rumble Strip".

RUMBLE STRIPS

Rumble strips shall be installed in rural areas with posted speeds greater than 50 M.P.H. Rumble strips will not be required in urban areas or where there is development in close proximity to the highway. The Engineer shall provide the exact start and stop locations for the rumble strip installation.

The gaps for the rumble strip installation as detailed on the standard plates shall be included with the measurement and payment.

Rumble strips shall not be placed on any bridge deck or within 25 feet of the approach slab or within 50 feet of any railroad crossing.

The placement of rumble strips from the driving lane may vary depending on the existing typical section of the roadway as directed by the Engineer.

The Contractor shall install rumble strips as per standard plate shown in the plans. The rumble strips must be grooved into the asphalt concrete surfacing. Following installation, the rumble strips shall be flush sealed with SS-1h or CSS-1h Asphalt for Flush Seal.

Rumble Strip installation shall be completed prior to application of the Flush Seal and Permanent Pavement Markings.

In the event the Flush Seal is eliminated from the contract, the Contractor will still be required to apply a Flush Seal to the newly installed 12" Rumble Strip at a width of 1.5' and at the same rate as specified in this plan set. No adjustment in payment will be made and SS-1h or CSS-1h Asphalt for Flush Seal will be paid at the contract unit price per ton.

All costs for installing the rumble strips shall be paid for at the contract unit price per mile for "Grind 12" Rumble Strip or Stripe in Asphalt Concrete".

REFURBISH MAILBOXES

The Contractor shall reset the existing mailboxes on new posts with the necessary support hardware for single assemblies (See Standard Plate No's. 900.02 and 900.03). The Contractor may submit documentation of an alternate NCHRP 350 crashworthy compliant mailbox support system to the Department for review and approval. The local Postmaster will determine the recommended mounting height of the mailboxes throughout the project. The Contractor shall coordinate with the Engineer on the proper postal representative to contact.

The mailboxes shall be removed and reset on the nearest approach and/or as determined by the Engineer at a minimum of 20 feet from the roadway centerline.

The mailboxes located at MRM 83.00+0.656 shall be relocated to the southwest corner of the approach as directed by the Engineer.

All costs for removing existing mailboxes, providing temporary mailboxes, and resetting mailboxes with new posts and necessary support hardware shall be incidental to the contract unit price per each for "Refurbish Single Mailbox" and "Refurbish Double Mailbox".

TABLE OF REFURBISH MAILBOX

MRM	L/R	Single (Each)	Double (Each)
87.00 + 0.930	L	1	-
87.00 + 0.633	L	1	-
85.00 + 0.514	L	-	1
83.00 + 0.656	L	1	5
	Totals:	3	6

STORAGE UNIT

The Contractor shall provide a storage unit such as a portable storage container or a semi-trailer meeting the minimum size requirements from the table below:

Project Total Asphalt Concrete Tonnage	Minimum Internal Size (Cu Ft)	Minimum External Size (L x W x H)
Less than 50,000 ton	1,166	20' x 8' x 8.6' std
More than 50,000 ton	2,360	40' x 8' x 8.6' std
All Gyratory Controlled QC/QA Projects	2,360	40' x 8' x 8.6' std

The storage unit is intended for use only by the Engineer for the duration of the project. The QC lab personnel or the Contractor will not be allowed to use the storage container while it is on the project, without permission of the Engineer.

The storage unit shall be on site and operational prior to asphalt concrete production. Upon completion of asphalt concrete production, the Engineer will notify the Contractor when the storage unit can be removed from the project. The storage unit use will not exceed 30 calendar days from the completion of asphalt concrete production. The storage unit will remain the property of the Contractor.

The storage unit shall be weather proof and shall be set in a level position. The storage unit shall be able to be locked with a padlock.

The storage unit shall be placed adjacent to the QA lab, as approved by the Engineer.

The following shall apply when the storage unit provided on the project is a portable storage container:

The portable storage container shall be constructed of steel.

The portable storage container shall be set such that it is raised above the surrounding ground level to keep water from ponding under or around the storage container.

The following shall apply when the storage unit provided on the project is a semi-trailer:

A set of steps and hand railings shall be provided at the exterior door. If the floor of the semi-trailer is 18 inches or more above the ground, a landing shall be constructed at the exterior door. The minimum dimensions for the landing shall be 4 feet by 5 feet. The top of the landing shall be level with the threshold or opening of the doorway.

The semi-trailer may be connected to the QA lab by a stable elevated walkway. The walkway shall be a minimum of 48 inches wide and contain handrails installed at 32 inches above the deck of the walkway. The walkway shall be constructed such that it is stable and the deck does not deform during use and allows for proper door operation. Walkway construction shall be approved by the Engineer.

All cost for furnishing, maintaining, and removing the storage unit including labor, equipment, and materials including any necessary walkways, landings, stairways, and handrails shall be included in the contract unit price per each for "Storage Unit".

TYPE III FIELD LABORATORY

The lab shall be equipped with an internet connection such as DSL, cable modem, or other approved service. The internet connection shall be provided with a multi-port wireless router. The internet connection shall be a minimum speed of 512 Kb unless limited by job location and approved by the DOT. Prior to installing the wireless router the Contractor shall submit the wireless router's technical data to the Area Office to check for compatibility with the state's computer equipment. The internet connection is intended for state personnel usage only. The Contractor's personnel are prohibited from using the internet connection unless pre-approved by the Project Engineer.

These items shall be incidental to the contract unit price per each for "Type III Field Laboratory".

HIGH FLOW SILT FENCE

The high flow silt fence fabric provided shall be from the approved product list. The approved product list for high flow silt fence may be viewed at the following internet site:

http://sddot.com/business/certification/products/Default.aspx

High flow silt fence shall be placed at the locations noted in the table and at locations that will minimize siltation of adjacent streams, lakes, dams, or drainage areas as determined by the Engineer during construction. Refer to Standard Plate 734.05 for details.