



# Department of Transportation

## Office of Project Development

700 E Broadway Avenue

Pierre, South Dakota 57501-2586 605/773-3268

FAX: 605/773-2614

May 1, 2015

### ADDENDUM NO. 1

**RE: Item #1, May 6, 2015 Letting - IM 0292(78)073, PCN 0511, Lincoln, Minnehaha County - Temporary Grading, Asphalt Concrete Surfacing, Temporary Structure, and Crossovers**

#### 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:** Please remove the Special Provisions checklist and replace with attached Special Provisions checklist revised 4/28/15.

Please remove the "Special Provision for Contract Time", dated 2/17/15 and replace with the "Special Provision for Contract Time", dated 4/28/15.

**PEN AND INK CHANGE:** change the completion date from November 6, 2015 to April 29, 2016 on both the NOTICE TO CONTRACTORS and the PROPOSAL.

**BID ITEM FILE:** NO CHANGE

**PLANS:** Please destroy sheets B4 and B5 and replace with the enclosed sheets, dated 4/30/15.

**Sheet B4:** UNDERCUTTING FOR SELECT SUBGRADE TOPPING note was revised.

**Sheet B5:** REMOVAL OF EXISTING CONCRETE PAVEMENT note was revised.

Sincerely,

Sam Weisgram  
Engineering Supervisor

SW/cj

CC: Craig Smith, Mitchell Region Engineer  
Travis Dressen, Sioux Falls Area Engineer

REV. 4/28/15

SPECIAL PROVISIONS

PROJECT NUMBER(S): IM 0292(78)073 PCN: 0511

TYPE OF WORK: TEMPORARY GRADING, ASPHALT CONCRETE SURFACING,  
TEMPORARY STRUCTURE, AND CROSSOVERS

COUNTIES: LINCOLN, MINNEHAHA

The following clauses have been prepared subsequent to the Standard Specifications for Roads and Bridges and refer only to the above described improvement, for which the following Proposal is made. In case of any discrepancy or conflict between said specifications and these Special Provisions, the latter are to govern.

The Contractor's attention is directed to the need for securing from the Department of Environment & Natural Resources, Foss Building, Pierre, South Dakota, permission to remove water from public sources (lakes, rivers, streams, etc.). The Contractor should make his request as early as possible after receiving his contract, and insofar as possible at least 30 days prior to the date that the water is to be used.

Greg Johnson is the official in charge of the Sioux Falls Career Center for Lincoln, Minnehaha Counties.

**THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:**

**Special Provision for Contract Time, dated 4/28/15.**

**Special Provision for Subletting of Contract, dated 2/17/15.**

**Special Provision Regarding Section 404 of the Clean Water Act, dated 2/10/15.**

**Fact Sheet #23**

**Special Provision for Contractor Staking, dated 2/17/15.**

**Special Provision for Contractor Furnished Mix Designs for PCC Pavement, dated 10/27/14.**

**Special Provision for On-the-Job Training Program, dated 7/10/12.**

Special Provision for Contractor Administered Preconstruction Meeting, dated 4/18/13.

Special Provision for Electronic Bidding Requirements, dated 12/18/13.

Special Provision for Fuel Cost Adjustment, dated 7/13/06.

Special Provision for Differing Site Conditions, dated 12/19/13.

Special Provision for Suspension of Work, dated 2/13/04.

Standard Title VI Assurance, dated 7/14/08.

Special Provision For Disadvantaged Business Enterprise, dated 12/19/12.

Special Provision For EEO Affirmative Action Requirements on Federal and Federal-aid Construction Contracts, dated 9/1/97.

Special Provision For Required Contract Provisions Federal-aid Construction Contracts, Form FHWA 1273 (Rev. May/1/12), dated 4/30/13.

Required Contract Provisions Federal-aid Construction Contracts, Form FHWA 1273 (Rev. 5/1/12).

Special Provision Regarding Minimum Wage on Federal-Aid Projects, dated 4/30/13.

Wage and Hour Division US Department of Labor Washington DC.

- US Dept. of Labor Decision Number SD100010, dated 8/30/13.

Supplemental Specification for Errata, dated 3/3/10.

Supplemental Specification to Standard Specifications for Roads and Bridges, dated 3/3/10.

Special Provision for Price Schedule for Miscellaneous Items, dated 9/26/13.

Special Provision Regarding Storm Water Discharge, dated 5/3/13.

General Permit for Storm Water Discharges Associated with Construction

Activities, dated 2/1/10. <http://denr.sd.gov/des/sw/Permits/ConstructionGeneralPermit2010.pdf>

\* \* \* \*

**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
CONTRACT TIME**

**PROJECT IM 0292(78)073; PCN 0511  
LINCOLN & MINNEHAHA COUNTIES**

**APRIL 28, 2015**

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The Contractor will complete all work on the project by the April 29, 2016 overall completion date.

**Phase I Work Restriction**

The Contractor will maintain two lanes of traffic on I29 Northbound between the hours of 6:00 AM and 9:00 AM.

The Contractor will maintain two lanes of traffic on I29 Southbound between the hours of 4:00 PM and 7:00 PM.

**Phase III Work Restriction**

The Contractor will be allowed to close the road to traffic for placement of the temporary bridge between the hours of 10:00 PM and 6:00 AM.

**November 6, 2015 Substantial Completion Requirement**

In addition, the Contractor will substantially complete the project by the November 6, 2015 substantial completion date. The Department will consider the project substantially complete when all of the following have occurred:

The Contractor has completed all contract work except removal of temporary traffic control devices required to remain in place and be maintained during the winter shutdown period as detailed in Phase III.

The Engineer, in his or her sole discretion will determine when the project is substantially complete.

The Contractor will complete all work on the project prior to the substantial completion date or the substantial completion date as amended by formally approved time extensions. If the Contractor does not complete all work by the substantial completion date or the substantial completion date as amended by formally approved time

extensions, the Department will assess liquidated damages in accordance with Section 8.7. The Department will assess liquidated damages for each working day the work (project) is late until the Contractor completes all required contract work.

In the event the Contractor does not substantially complete the project on time, the Department will charge working days in accordance with Section 8.6 B.

### **Time Extensions**

In order to avoid or reduce liquidated damage assessments, the Contractor may request a time extension for the overall completion date. The Department will consider these time extension requests using the same considerations that apply when granting an extension of Contract Time under Section 8.6, except extra work or an increase in quantities will not qualify for an automatic extension of time based on a proportional increase in the contract amount.

### **Failure to Complete on Time**

The Contractor will complete all work on the project prior to the overall completion date or the overall completion date as amended by formally approved time extensions. If the Contractor does not complete all work by the overall completion date or the overall completion date as amended by formally approved time extensions, the Department will assess liquidated damages in accordance with Section 8.7. The Department will assess liquidated damages for each working day the work (project) is late until the Contractor completes all contract work.

In the event the Contractor does not complete the work (project) on time, the Department will charge working days in accordance with Section 8.6 B.

### **Expected Adverse Weather Days**

The Department has provided Attachment 1 for information purposes only as a guide to bidders. This table depicts the typical number of adverse weather days expected for any given month, based on historical records. The Department will consider this project a surfacing and structural project in Zone 6.

The Department will consider expected adverse weather days cumulative in nature over the total time available for contract completion. When considering a time extension for the overall completion date, the Engineer will compare the total number of expected adverse weather days against the total number of actual adverse weather days for the entire period during which the work was to be completed.

\* \* \* \* \*

# ATTACHMENT 1

Figure A - Expected Adverse Weather Days for South Dakota

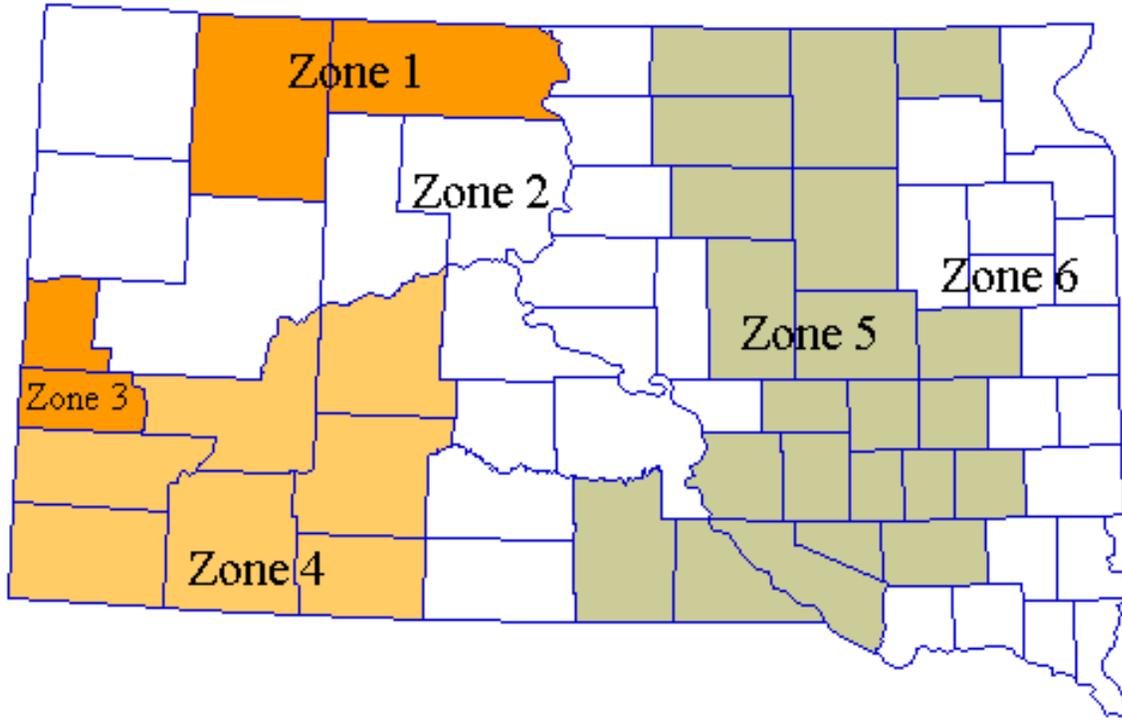


Table 1 - Expected Adverse Weather Days for South Dakota

	Grading Projects						Surfacing and Structural Projects					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Jan	18	18	16	16	22	24	18	18	15	16	21	23
Feb	19	18	12	14	19	21	19	18	12	14	19	21
Mar	12	10	9	8	11	13	12	10	9	8	10	12
Apr	6	5	8	5	6	6	5	4	6	4	4	4
May	6	6	8	6	6	6	5	5	6	4	4	5
Jun	7	6	7	6	7	8	5	5	5	4	5	6
Jul	5	5	6	5	6	7	4	4	5	3	4	5
Aug	4	4	5	4	5	6	3	3	4	3	4	4
Sep	3	3	4	3	4	5	2	2	3	2	3	4
Oct	4	3	5	3	4	4	3	3	4	2	3	3
Nov	11	9	8	7	10	12	11	9	8	7	10	11
Dec	21	19	15	14	20	22	21	19	15	14	20	22

NOTE: Includes Holidays and Weekends.

Revised: 04-30-2015 (MRK)

**TABLE OF OPTION BORROW EXCAVATION**

	(CuYd)
Option Borrow Excavation	75,945
Topsoil in Option Borrow Pits	<u>7,500</u>
Total:	83,445

**HAUL**

Included in the Table of Excavation Quantities by Balances are Dead Haul, Option Borrow Haul and Haul. They are not pay items and are for informational purposes only.

Dead Haul: Estimated quantity (CuYdSta) for moving borrow excavation material or option borrow excavation material from the borrow or option borrow site to the centerline mainline station listed in the Table of Borrow Pits.

Option Borrow Haul: Estimated quantity (CuYdSta) for moving option borrow excavation material from the centerline mainline station listed in the Table of Borrow Pits to the locations where it is needed throughout the earthwork balance.

Haul: Estimated quantity (CuYdSta) for moving unclassified excavation material to the locations where it is needed throughout the earthwork balance. The quantity also includes haul for moving Out-of-Balance Excavation material from an earthwork balance to another earthwork balance.

For Purpose of Extra Haul Computations:

$$\text{Average Haul} = \text{Haul/Unclassified Excavation} = 227,244/31,748 = 7.2 \text{ Sta.}$$

$$\text{Average Option Borrow Haul} = (\text{Option Borrow Haul} + \text{Dead Haul}) / \text{Total Option Borrow Excavation} = (242,373 + 4,730,486) / 75,945 = 65.5 \text{ Sta.}$$

**UNDERCUTTING FOR SELECT SUBGRADE TOPPING**

After the existing asphalt is removed, the existing gravel cushion/ base course shall be removed and stockpiled. The removed PCCP will be crushed to a minus 2.5 inch size and shall be incorporated into the Select Subgrade Topping.

In all cut sections, the subgrade will be undercut to a depth of 1.5 feet. The undercut area will be scarified to a depth of 6 inches and recompact by the Specified Density Method. The salvaged asphalt mix and granular base material and crushed PCCP will be blended with the soil taken from the undercut and used as Select Subgrade Topping to backfill the undercut. The blended backfill material will consist of a mix of approximately 2 parts undercut soil to 1 part salvaged surfacing and gravel cushion/ base course.

In fill sections, the top 1.5 feet of subgrade will be constructed with the Select Subgrade Topping. To obtain the Select Subgrade Topping, the salvaged asphalt mix and granular base material and crushed PCCP will be mixed with new embankment material at the same 2:1 rate as the undercut backfill. Shallow embankment sections, i.e. fills less than 1.5 feet in height measure at the finished subgrade shoulder, will be undercut to ensure the upper 1.5 feet of subgrade is constructed with Select Subgrade Topping.

Payment to remove the undercut shall be paid for once as Unclassified Excavation.

All cost associated with the crushing, mixing, and placement of the Select Subgrade Topping material shall be included in the contract unit price per cubic yard for Select Subgrade Topping.

Select Subgrade Topping shall be compacted with sheepsfoot or other approved rollers. Compaction shall be as per 260.3.D. Additional test strips will be made as required by changes in soil types. Moisture requirements will be determined in accordance with SD 104, except the optimum and field moisture will be determined using material passing a 3/4-inch sieve. Density testing will be performed a minimum of 1 per half mile per lift. Moisture testing will be performed a minimum of 1 per day.

Select Topping will not be required on the NB Diversion or any other area that will not become part of the permanent roadway.

**UNSTABLE MATERIAL EXCAVATION**

The areas of unstable material excavation are drawn on the cross sections with a normal depth of 2 feet. The estimated quantity of 4,529 cubic yards of unstable material excavation shall be paid for at the contract unit price per cubic yard for "Unclassified Excavation".

All areas designated as Unstable shall be excavated. The unstable material excavated on this project shall be placed outside the subgrade shoulder in fill sections or stockpiled and used as topsoil.

Field measurement of unstable material excavation shall not be made. However, if there are additional areas of unstable material excavation other than what is shown in the plans, the Engineer shall direct removal of these areas and the additional areas will be measured according to the Engineer.

**TABLE OF UNSTABLE MATERIAL EXCAVATION**

Station	to Station	L/R	Depth (Ft)	Quantity (CuYd)
43+50	47+00	R	2	419
69+50	81+00	R	2	1,759
130+00	131+00	R	2	368
18+50	20+00 (Diversion)	R	2	1,506
21+50	23+00 (Diversion)	R	2	477
60+00	60+50 (I229 Ramp C)	R	2	0
61+00	62+00 (I229 Ramp C)	R	2	0
Total:				4,529

**MUCK EXCAVATION**

The areas of muck excavation are drawn on the cross sections with a normal depth of 3 feet. The estimated quantity of 5,881 cubic yards of muck excavation shall be paid for at the contract unit price per cubic yard for "Muck Excavation".

Muck excavation consists of the removal of highly organic and/or highly saturated material from the designated areas shown on the cross sections. Highly organic muck material shall not be used in the embankment but may be used as topsoil. Non-organic muck material may be used as embankment

outside of the fill subgrade shoulder if it is properly handled and dried prior to placement in the embankment.

Field measurement of muck excavation will not be made unless the Engineer orders additional excavation, or when the Engineer determines, in accordance with Section 120.3.A.1 of the Specifications, that the classification of excavation be changed.

If the areas designated as muck excavation can be removed with similar equipment and procedures as used for unclassified excavation, the material shall be measured and paid for as "Unclassified Excavation".

**TABLE OF MUCK EXCAVATION**

Station	to Station	L/R	Depth (Ft)	Quantity (CuYd)
47+00	62+00	R	3	3,495
64+00	65+00	R	3	337
68+50	69+50	R	3	334
90+00	92+50	R	3	791
98+00	102+00	R	3	924
Total:				5,881

**SALVAGE AND STOCKPILE ASPHALT MIX MATERIAL and SALVAGE AND STOCKPILE ASPHALT MIX AND GRANULAR BASE MATERIAL**

An estimated 1,488.9 tons (787.7 Cubic Yards) of asphalt mix material shall be salvaged from the entire length of the existing highway and stockpiled at a site satisfactory to the Engineer.

An estimated 15,027.6 tons (7,951.1 Cubic Yards) of asphalt mix and granular base material shall be salvaged from the entire length of the existing highway (including ramps) and stockpiled at a site satisfactory to the Engineer.

The quantities of salvage asphalt mix material and salvage asphalt mix and granular base material may vary from the plans. No adjustment will be made to the contract unit prices for variations of the quantities of "Salvage and Stockpile Asphalt Mix Material" and "Salvage and Stockpile Asphalt Mix and Granular Base Material."

A table of estimated salvageable material quantities is located in Section F – Surfacing. These quantities were used to compute the unclassified excavation quantities.



**TABLE OF BORROW LOCATIONS IN EARTHWORK BALANCE**

Site	Station	L/R	Dead Haul Distance (Sta)	Option Borrow Exc. (CuYd)	Dead Haul (CuYdSta)
1	70+50	R	103	9,888	1,018,464
2	112+50	R	61	3,626	221,186
3	130+00	R	55	8,898	489,390
4	19+50 (Div)	R	57	23,626	1,346,682
5	25+00 (Div)	R	55	29,603	1,628,165
8	77+30	M	97	197	19,109
9	103+70	M	70	107	7,490
Totals:			75,945	4,730,486	

Stations in the above table are not pit locations, but stations where the borrow is interjected into the earthwork balance for haul calculations.

The quantities listed in the above table for Dead Haul are for information only. The Dead Haul and Option Borrow Excavation quantities are also included in the Table of Excavation Quantities by Balances.

**REMOVAL OF EXISTING CONCRETE PAVEMENT**

**I229 Ramp C STA. 42+00 to STA. 64+00**  
**I229 Ramp G (based on Ramp C STA. 37+00 to 64+00)**

The Contractor shall incorporate the removed concrete pavement into the subgrade as indicated in the Undercutting for Select Subgrade Topping notes.

The existing 9 inch dowel jointed P.C.C. Pavement on I229 Ramp C is typically 38 feet wide. The existing 9 inch dowel jointed P.C.C. Pavement on I229 Ramp G is typically 25 feet wide.

The existing contraction joints are spaced at approximately 46.5 feet.

The aggregate in the existing P.C.C. pavement is quartzite.

**TABLE OF CONCRETE PAVEMENT REMOVAL**

Station	to Station	L/R	Quantity (SqYd)
42+00	64+00 (Ramp C)	L&R	9289
37+00	64+00 (Ramp G)	70'R	7200
Total:			16,489

**CONTROLLED DENSITY FILL FOR PIPE**

Controlled density fill shall be a flowable mortar material. Materials shall be in accordance with the Specifications, except as modified below. The mix design shall be the following:

Material	Rate per Cubic Yard
Portland Cement Type I, II, III, or V	100 Lb
Fine Aggregate	2600 Lb
Coarse Aggregate	None
Water	60 Gal
Fly Ash, Type C	300 Lb

The fine aggregate shall be natural sand consisting of mineral aggregate particles conforming to the following gradation requirements:

Passing 3/8 Inch Sieve	100%
Passing No. 200 Sieve	0-10%

The mix design shown above is designed to produce a minimum compressive strength of 100 psi. The Engineer may allow adjustments to the proportion of water at the site to provide the necessary consistency of the mix.

Controlled density fill shall be contained within the required limits with sandbags or other methods approved by the Engineer.

The Contractor shall prevent the flotation or movement of the culvert due to the buoyant force from the controlled density fill until the controlled density fill hardens.

All costs for furnishing and installing the controlled density fill, including sandbags, labor, materials, equipment and incidentals necessary to complete the work shall be included in the contract unit price per cubic yard for "Controlled Density Fill."

Plans quantity will be the basis for payment unless otherwise ordered by the Engineer.

Station	Quantity (CuYd)	Fill Height (between pipes)
90+79	1.4	Haunch
Total:		1.4

**CONCRETE PIPE CONNECTIONS**

Pipe connections to existing pipes, manholes, junction boxes, and drop inlets shall be done by breaking a hole into the existing structure and inserting the pipe. A concrete collar shall then be poured around the pipe in the area of the connection.

When it is not possible to use a normal pipe joint (male-female ends), connections to existing pipe shall be made by placing a 2' wide by 6" thick M6 concrete collar around the outside of the connection. The concrete collar shall be reinforced with 6x6 W2.9 x W2.9 wire mesh.

All costs for constructing the concrete collars including materials and labor shall be incidental to the contract unit price per foot for the corresponding pipe bid item.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0292(78)073	B5	B42

Revised: 04-30-2015 (MRK)

**TABLE OF MANHOLES**

Station	L/R	Frame and Lid Type	Size (Diameter)	Depth	Quantity (Each)
122+14	R	A7	42"	4 Ft	1

**TABLE OF SUPERELEVATION**

Station	to Station	Description
I29 Mainline		
41+08.59	80+20.45	- Normal Crown Section
80+20.45	80+83.55	- Superelevation Transition
80+83.55	94+70.36	- 5729' Radius Curve Right 0.034'/ Superelevation Rate Point of Rotation 12' Right of NB Centerline
94+70.36	95+32.90	- Superelevation Transition
95+32.90	114+31	- Normal Crown Section
I29 NB Diversion		
13+60.00	27+39.06	- Normal Crown Section
27+39.06	28+02.06	- Superelevation Transition
28+02.06	28+40.00	- 4300' Radius Curve Right 0.034'/ Superelevation Rate Point of Rotation at Diversion Centerline
I29 Mainline		
128+41.16	134+83.74	- 5760' Radius Curve Right 0.034'/ Superelevation Rate Point of Rotation 12' Right of NB Centerline
134+83.74	135+46.33	- Superelevation Transition
135+46.33	177+62.72	- Normal Crown Section
Ramp C		
37+00.00	56+51.97	- 1898' Radius Curve Right 0.06'/ Superelevation Rate Point of Rotation at Ramp Centerline
56+51.97	58+74.97	- Superelevation Transition
58+74.97	64+00.00	- Normal Crown Section

