NO. 13

NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

REQUEST FOR PROPOSAL

STATE AID PROJECT NO. SOIB-7-058(013)000 (PCN-20416)

8.938 Miles

ROADWAY WIDENING, FULL DEPTH RECLAMATION, CONCRETE PAVING, HMA OVERLAY, TURN LANES, CULVERT EXTENSIONS, HMA SHOULDERS, REINFORCED CONCRETE BOX CULVERT EXTENSION, & INCIDENTALS

ND 58 FROM JCT ND 200 NORTH TO JCT ND 1804

MCKENZIE and WILLIAMS COUNTIES

BID OPENING: The bidder's proposal will be accepted via the Bid Express on-line bidding exchange at www.bidx.com until **09:30AM Central Time on February 05, 2016.**

Prior to submitting a Proposal, the Bidder shall complete all applicable sections and properly execute the Proposal Form in accordance with the specifications.

Proposal Form of:

_____
(Firm Name)

_____
(Address, City, State, Zipcode)

(For official use only)

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Project: SOIB-7-058(013)000 (PCN-20416)

The company, firm, corporation, or individual hereby acknowledges that it has designated a responsible person or persons as having the authority to obligate the company, firm, or individual, through electronic or paper submittal, to the terms and conditions described herein and in the contract documents. The designated responsible person submitting this proposal shall be hereafter known as the bidder. By submitting this proposal, the bidder fully accepts and agrees to all the provisions of the proposal. The bidder also certifies that the information given in this proposal is true and the certifications made in this proposal are correct.

The bidder acknowledges that they have thoroughly examined the plans, proposal form, specifications, supplemental specifications, special provisions and agrees that they constitute essential parts of this proposal.

The bidder acknowledges that all line items which contain a quantity shall have a unit price bid. Any line item which is bid lump sum shall contain a lump sum bid price.

The bidder acknowledges that they understand that the quantities of work required by the plans and specifications are approximate only and are subject to increases and decreases; the bidder understands that all quantities of work actually required must be performed and that payment therefore shall be at the prices stipulated herein; that the bidder proposes to timely furnish the specified materials in the quantities required and to furnish the machinery, equipment, labor and expertise necessary to competently complete the proposed work in the time specified.

NON-COLLUSION AND DEBARMENT CERTIFICATION

The bidder certifies that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid.

By submitting this proposal, the bidder certifies to the best of his/her knowledge and belief that he/she and his/her principles:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal Department or agency;
b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or perform a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property

Project: SOIB-7-058(013)000 (PCN-20416)

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph b. of the certification; and
d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or Local) terminated for cause or default

Where the prospective bidder is unable to certify to any of the statements in this certification, the bidder shall submit an explanation in the blanks provided herein. The explanation will not necessarily result in denial of participation in a contract:

Explanation:_____
_____
_____
_____

If the prequalified bidder's status changes, he/she shall immediately submit a new fully executed non-collusion affidavit and debarment certification with an explanation of the change to the Contract Office prior to submitting the bid.

Failure to furnish a certification or an explanation will be grounds for rejection of a bid.

BID LIMITATION (Optional)

The bidder who desires to bid on more than one project on which bids are to be opened on the same date, and who also desires to avoid receiving an award of more projects than the bidder is equipped to handle, may bid on multiple projects and limit the total amount of work awarded to the bidder on selected projects by completing the "Bid Limitation".

The Bid Limitation must be filled in on each proposal form for which the Bidder desires protection. Each such proposal must be covered by a proposal guaranty.

The bid limitation can be made by declaring the total dollar value of work OR total number of projects a bidder is willing to perform.

The Bidder desires to disqualify all of his/her bids on this bid opening that exceed a total dollar value of

$_____

OR

that exceed a total number of _____ projects.

The Bidder hereby authorizes the Department to determine which bids shall be disqualified.

Project: SOIB-7-058(013)000 (PCN-20416)

PERMISSIBLE DISCOUNT (optional)

Only when invited to do so in the Request for Proposal by Special Provision, Bidders are permitted to offer a discount on a specific project (discount project) if they are awarded the contract on one or more additional projects bid at the same bid opening time and date. The bidder must present the proposal so that it can be considered with or without the discount. The bid or discount offered on the "discount project" will not affect the determination of the low bid of any other project.

When discounts are offered, they must be presented as a reduction in the unit price for one or more items of work in the specified proposal (discount project).

Space for Offering Discounts:
_____
_____
_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

TOTAL DISCOUNT_____

It is understood that the discount will only apply if awarded under the conditions as listed above and signed by the bidder.

Project: SOIB-7-058(013)000 (PCN-20416)

RECEIPT OF ADDENDA ACKNOWLEDGEMENT

We hereby acknowledge receipt of the following addenda:

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

PROPOSAL GUARANTY

A proposal guaranty is required. The proposal guaranty must comply with Section 102.09, "Proposal Guarantee" of the Standard Specifications.

TYPE OF PROPOSAL GUARANTY APPLIED TO THIS PROJECT (Check one):

_____ Annual Bid Bond*

_____ Single Project Bid Bond

_____ Certified or Cashier's Check

*Annual Bid Bond is required when submitting proposals electronically

BID ITEMS

Project: SOIB-7-058(013)000 (PCN-20416)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
001	103	0100	CONTRACT BOND	L SUM	1.				
002	103	0200	ESCROW OF BID DOCUMENTATION	L SUM	1.				
003	201	0330	CLEARING & GRUBBING	L SUM	1.				
004	202	0112	REMOVAL OF CONCRETE	SY	147.				
005	202	0115	REMOVAL OF CONCRETE-SITE 1	L SUM	1.				
006	202	0116	REMOVAL OF CONCRETE-SITE 2	L SUM	1.				
007	202	0123	REMOVE & SALVAGE AGGREGATE BASE	TON	16,920.				
008	202	0135	REMOVAL OF BITUMINOUS SURFACING	TON	4,783.				
009	202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	29.				
010	202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	3,710.				
011	203	0101	COMMON EXCAVATION-TYPE A	CY	27,840.				
012	203	0108	TOPSOIL-BORROW AREA	CY	15,833.				
013	203	0109	TOPSOIL	CY	60,912.				
014	203	0113	COMMON EXCAVATION-WASTE	CY	23,233.				
015	203	0121	TOPSOIL-WETLAND	CY	782.				
016	203	0140	BORROW-EXCAVATION	CY	158,326.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
017	210	0051	BOX CULVERT EXCAVATION - SITE 1	EA	1.				
018	210	0052	BOX CULVERT EXCAVATION - SITE 2	EA	1.				
019	210	0202	FOUNDATION PREPARATION-SITE 1	L SUM	1.				
020	210	0203	FOUNDATION PREPARATION-SITE 2	L SUM	1.				
021	210	0210	FOUNDATION FILL	CY	183.				
022	216	0100	WATER	M GAL	4,947.				
023	220	0100	PREPARE STOCKPILE SITE	L SUM	1.				
024	220	0200	RESTORE STOCKPILE SITE	L SUM	1.				
025	251	0200	SEEDING CLASS II	ACRE	115.				
026	251	1000	WETLAND SEED	ACRE	5.				
027	251	2000	TEMPORARY COVER CROP	ACRE	120.				
028	253	0101	STRAW MULCH	ACRE	240.				
029	255	0103	ECB TYPE 3	SY	461.				
030	256	0200	RIPRAP GRADE II	CY	260.				
031	260	0200	SILT FENCE SUPPORTED	LF	2,940.				
032	260	0201	REMOVE SILT FENCE SUPPORTED	LF	2,940.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
033	261	0112	FIBER ROLLS 12IN	LF	95,855.				
034	261	0113	REMOVE FIBER ROLLS 12IN	LF	49,490.				
035	262	0100	FLOTATION SILT CURTAIN	LF	80.				
036	262	0101	REMOVE FLOTATION SILT CURTAIN	LF	80.				
037	302	0100	SALVAGED BASE COURSE	TON	116,545.				
038	302	0316	TRAFFIC SERVICE GRAVEL	CY	200.				
039	306	0510	FULL DEPTH RECLAMATION	SY	141,782.				
040	401	0050	TACK COAT	GAL	9,477.				
041	401	0060	PRIME COAT	GAL	18,082.				
042	401	0160	BLOTTER MATERIAL CL 44	TON	545.				
043	411	0105	MILLING PAVEMENT SURFACE	SY	1,200.				
044	430	0045	SUPERPAVE FAA 45	TON	28,972.				
045	430	1000	CORED SAMPLE	EA	88.				
046	430	5828	PG 58-28 ASPHALT CEMENT	TON	1,276.				
047	430	6434	PG 64-34 ASPHALT CEMENT	TON	442.				
048	550	0302	8.5IN NON-REINF CONCRETE PVMT CL AE-DOWELED	SY	123,723.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
049	602	0130	CLASS AAE-3 CONCRETE	CY	79.800				
050	602	1131	CLASS AE-3 CONCRETE-BOX CULVERT	CY	144.600				
051	606	0806	8FT X 6FT PRECAST RCB CULVERT	LF	46.				
052	606	4806	8FT X 6FT PRECAST RCB END SECTION	EA	2.				
053	612	0114	REINFORCING STEEL-GRADE 60-BOX CULVERT	LBS	20,117.				
054	612	0115	REINFORCING STEEL-GRADE 60	LBS	11,933.				
055	702	0100	MOBILIZATION	L SUM	1.				
056	704	0100	FLAGGING	MHR	5,000.				
057	704	1000	TRAFFIC CONTROL SIGNS	UNIT	3,570.				
058	704	1052	TYPE III BARRICADE	EA	100.				
059	704	1060	DELINEATOR DRUMS	EA	200.				
060	704	1067	TUBULAR MARKERS	EA	650.				
061	704	1080	STACKABLE VERTICAL PANELS	EA	2,600.				
062	704	1081	VERTICAL PANELS-BACK TO BACK	EA	50.				
063	704	1185	PILOT CAR	HR	2,000.				
064	706	0400	FIELD OFFICE	EA	1.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
065	706	0500	AGGREGATE LABORATORY	EA	1.				
066	706	0550	BITUMINOUS LABORATORY	EA	1.				
067	706	0600	CONTRACTOR'S LABORATORY	EA	2.				
068	709	0155	GEOSYNTHETIC MATERIAL TYPE RR	SY	552.				
069	714	0310	PIPE CONC REINF 18IN CL III	LF	14.				
070	714	0615	PIPE CONC REINF 24IN CL III	LF	172.				
071	714	0820	PIPE CONC REINF 30IN CL III	LF	2,603.				
072	714	0905	PIPE CONC REINF 36IN CL III	LF	24.				
073	714	1005	PIPE CONC REINF 42IN CL III	LF	1,328.				
074	714	1105	PIPE CONC REINF 48IN CL III	LF	138.				
075	714	1310	PIPE CONC REINF 60IN CL III	LF	72.				
076	714	1510	PIPE CONC REINF 72IN CL III	LF	30.				
077	714	2165	PIPE CONC REINF ARCH 65IN X 40IN CL III	LF	827.				
078	714	3023	END SECT-TRAVERSABLE REINF. CONC.24IN	EA	21.				
079	714	3033	END SECT-TRAVERSABLE REINF. CONC.30IN	EA	2.				
080	714	3036	END SECT-TRAVERSABLE REINF. CONC.36IN	EA	3.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
081	714	4100	PIPE CONDUIT 18IN	LF	1,100.				
082	714	4106	PIPE CONDUIT 24IN-APPROACH	LF	3,098.				
083	714	4113	PIPE CONDUIT 30IN-APPROACH	LF	126.				
084	714	4116	PIPE CONDUIT 36IN-APPROACH	LF	118.				
085	714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	18.				
086	720	0110	RIGHT OF WAY MARKERS	EA	246.				
087	720	0125	ALIGNMENT MONUMENTS	EA	52.				
088	720	0130	IRON PIN R/W MONUMENTS	EA	188.				
089	720	0135	IRON PIN REFERENCE MONUMENTS	EA	58.				
090	722	0120	MANHOLE 72IN	EA	4.				
091	722	1120	MANHOLE RISER 72IN	LF	29.				
092	722	4565	MEDIAN DRAIN PRECAST CONCRETE-TYPE A	EA	2.				
093	754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	29.800				
094	754	0115	FLAT SHEET FOR SIGNS-TYPE IX REFL SHEETING	SF	119.800				
095	754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	737.900				
096	754	0561	REFERENCE MARKER-TYPE A	EA	9.				

BID ITEMS

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
097	754	0592	RESET SIGN PANEL	EA	22.				
098	754	0805	OBJECT MARKERS - CULVERTS	EA	184.				
099	760	0001	RUMBLE STRIPS - CONCRETE SHOULDER	MILE	7.300				
100	760	0003	RUMBLE STRIPS - CONCRETE CENTERLINE	MILE	2.600				
101	760	0005	RUMBLE STRIPS - ASPHALT SHOULDER	MILE	17.900				
102	760	0007	RUMBLE STRIPS - ASPHALT CENTERLINE	MILE	2.800				
103	762	0112	EPOXY PVMT MK MESSAGE	SF	48.				
104	762	0113	EPOXY PVMT MK 4IN LINE	LF	52,799.				
105	762	0115	EPOXY PVMT MK 8IN LINE	LF	530.				
106	762	0117	EPOXY PVMT MK 24IN LINE	LF	23.				
107	762	0122	PREFORMED PATTERNED PVMT MK-MESSAGE(GROOVED)	SF	864.				
108	762	0430	SHORT TERM 4IN LINE-TYPE NR	LF	119,975.				
109	762	1305	PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED	LF	154,699.				
110	762	1309	PREFORMED PATTERNED PVMT MK 8IN LINE-GROOVED	LF	11,500.				
111	762	1325	PREFORMED PATTERNED PVMT MK 24IN LINE-GROOVED	LF	222.				
112	764	0131	W-BEAM GUARDRAIL	LF	395.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
113	764	0145	W-BEAM GUARDRAIL END TERMINAL	EA	4.				
114	764	0150	REMOVE & RESET GUARDRAIL	LF	300.				
115	764	0151	REMOVE W-BEAM GUARDRAIL & POSTS	LF	508.				
116	764	2081	REMOVE END TREATMENT & TRANSITION	EA	4.				
117	766	0100	MAILBOX-ALL TYPES	EA	11.				
118	900	1000	TEMPORARY STREAM DIVERSION	EA	2.				
119	910	0696	SLUICE GATE 18IN	EA	1.				
120	910	0702	SLUICE GATE 42IN	EA	1.				
121	920	1240	ARCHEOLOGIST	L SUM	1.				
122	920	1241	BIOLOGIST	L SUM	1.				
			TOTAL SUM BID						

Project: SOIB-7-058(013)000 (PCN-20416)

Type of Work: ROADWAY WIDENING, FULL DEPTH RECLAMATION, CONCRETE PAVING, HMA OVERLAY, TURN LANES, CULVERT EXTENSIONS, HMA SHOULDERS, REINFORCED CONCRETE BOX CULVERT EXTENSION, & INCIDENTALS

Counties: MCKENZIE and WILLIAMS

Length: 8.9380 Miles

TIME FOR COMPLETION:

The undersigned Bidder agrees, if awarded the contract, to prosecute the work with sufficient forces and equipment to complete the contract work within the allowable time specified as follows:

WORKING DAY CONTRACT: **NA** working days are provided. The Department will begin charging working days beginning **NA** or the date work begins on the project site, whichever is earlier.

CALENDAR DAY CONTRACT: **NA** calendar days are provided. The completion date will be determined by adding **NA** calendar days to **NA** or the date work begins on the project site, whichever is earlier.

COMPLETION DATE CONTRACT The project completion date is **09/30/2017 *** . The Department provides a minimum of **NA** working days. The Department will begin charging working days beginning **NA** or the date work begins on the project site, whichever is earlier.

***REFER TO SP 237(14) FOR WINTER SUSPENSION REQUIREMENTS. LIQUIDATED DAMAGES FOR FAILURE TO COMPLETE ALL WORK BY SEPTEMBER 30, 2017 SHALL BE CHARGED IN ACCORDANCE WITH SECTION 108.07B OF THE STANDARD SPECIFICATIONS.**

Project: SOIB-7-058(013)000 (PCN-20416)

Type of Work: ROADWAY WIDENING, FULL DEPTH RECLAMATION, CONCRETE PAVING, HMA OVERLAY, TURN LANES, CULVERT EXTENSIONS, HMA SHOULDERS, REINFORCED CONCRETE BOX CULVERT EXTENSION, & INCIDENTALS

Counties: MCKENZIE and WILLIAMS

Length: 8.9380 Miles

CONTRACT EXECUTION:

The undersigned Bidder agrees, if awarded the contract, to execute the contract form and furnish a contract bond within fifteen calendar days, as determined by NDCC Section 1-02-15, after date of notice of award, in accordance with the provisions of Sections 103.05 and 103.06 of the Standard Specifications.

AFFIDAVIT:

STATE OF _____)
) ss.
COUNTY OF _____)

The undersigned bidder, being duly sworn, does depose and say that they are an authorized representative of _____
CONTRACTOR NAME

of _____ , a
MAILING ADDRESS

☐ Individual ☐ Partnership ☐ Joint Venture ☐ Corporation

and that they have read, understand, acknowledge, and accept the entire proposal form; and that all statements made by said bidder are true and correct.

_____ , TITLE _____
BIDDER MUST SIGN ON THIS LINE

_____
TYPE OR PRINT SIGNATURE ON THIS LINE

Subscribed and sworn to before me this day.

_____
COUNTY

(Seal)

_____ _____
STATE DATE

_____
NOTARY PUBLIC

My commission expires _____

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

Job #13, Project No. SOIB-7-058(013)000

Roadway Widening, Full Depth Reclamation, Concrete Paving,
HMA Overlay, Turn Lanes, Culvert Extensions, HMA Shoulders,
Reinforced Concrete Box Culvert Extension, & Incidentals

INDEX OF PROVISIONS

Road Restriction Permits

NDDOT Supplemental Specifications dated October 1, 2015

Price Schedule for Miscellaneous Items dated October 1, 2014 (PS-1)

Appendix A of the Title IV Assurances dated October 1, 2014

Appendix E of the Title IV Assurances dated October 1, 2014

On-The-Job Training Program dated October 1, 2015

SP 3(14) Temporary Erosion & Sediment Best Management Practices

SP 4(14) Federal Migratory Bird Treaty Act

SP 233(14) Stringless Grade Control

SP 234(14) Dowel Bar Placement

SP 235(14) Flexible Pavement Surface Tolerance

SP 236(14) Temporary Water Diversion

SP 237(14) Winter Suspension

SP 258(14) Biologist

SP 5086(14) Permits and Environmental Considerations

Materials Pit List & Materials Source Certificate

SP Fuel Cost Adjustment Clause dated September 8, 2006

NOTICE

TO: All prospective bidders on all North Dakota Department of Transportation Highway Construction Projects.

Contractors moving construction equipment to NDDOT highway construction projects are subject to the Road Restriction Policy with the following modifications:

A. The contractor may purchase up to 10 single trip permits for each NDDOT highway construction project at a cost ranging from $20 to $70 each. These permits must be purchased from the Motor Carrier Division of the Highway Patrol at the central office of the NDDOT in Bismarck, North Dakota.

B. The $1 per mile fee will not be charged for Gross Vehicle Weights (GVW) exceeding 105,500 pounds, 105,500 pounds, and 105,000 pounds for highways Restricted by Legal Weights, 8 Ton, and 7 Ton highways respectively.

C. The $5 per ton per mile fee will be charged only for loads exceeding a GVW of 130,000 pounds, 120,000 pounds, 110,000 pounds and 80,000 pounds for highways Restricted by Legal Weights, 8 Ton, 7 Ton, and 6 Ton highways respectively.

D. The maximum weights per axle for each of the class restrictions still apply. If it is shown that more axles cannot be added, movement may be authorized; however, a $1 per ton per mile fee will be charged for all weight in excess of the restricted axle limits.

E. These construction equipment single trip permits apply to State and US Highways only.

F. The District Engineers and Highway Patrol will select the route of travel.

G. Contractors moving equipment to other than NDDOT highway construction projects are subject to all fees as shown in the Road Restriction Permit Policy.

H. Contractors must call the Highway Patrol prior to movement of all overweight loads on all State and US Highways.

NDDOT ROAD AND VEHICLE RESTRICTIONS Date Revised 05-22-10

ROAD RESTRICTION PERMITS

Permits shall be issued for the movement of non-divisible vehicles and loads on state highways which exceed the weight limits during spring road restrictions. The issuance of permits may be stopped or posted weights changed at any time based on the varying conditions of the roadways. Permits can be obtained from the Highway Patrol.

RESTRUCTION CLASSIFICATIONS WITH ALLOWABLE AXLE WEIGHTS AND GROSS VEHICLE WEIGHTS	PERMIT AND TON/MILE FEES
Highways Restricted by Legal Weight Single Axle -- 20,000 lbs. Tandem Axle -- 34,000 lbs. Triple Axle -- 48,000 lbs. 4 Axles or more -- 15,000 lbs. per axle Gross Vehicle Weight -- 105,500 lbs. Note: The above weights apply to state highways restricted by legal weights, other than interstate highways, in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the $1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle.	Permit Fee: $20-$70 per trip Ton Mile Fee: 105,501 lbs. to 130,000 lbs. GVW -- $1 per mile Over 130,000 lbs. GVW – $1 per mile **plus** $5 per ton per mile for that weight exceeding 130,000 lbs. GVW Exceeding axle limits -- $1 per ton per mile
8-Ton: Single Axle -- 16,000 lbs. Tandem Axle -- 32,000 lbs. 3 Axles or more -- 14,000 lbs. per axle Gross Vehicle Weight -- 105,500 lbs.	Permit Fee: $20-$70 per trip Ton Mile Fee: 105,501 lbs. to 120,000 lbs. GVW -- $1 per mile Over 120,000 lbs. GVW – $1 per mile **plus** $5 per ton per mile for that weight exceeding 120,000 lbs. GVW Exceeding restricted axle limits -- $1 per ton per mile
7-Ton: Single Axle -- 14,000 lbs. Tandem Axle -- 28,000 lbs. 3 Axles or more -- 12,000 lbs. per axle Gross Vehicle Weight -- 105,500 lbs.	Permit Fee: $20-$70 per trip Ton Mile Fee: 105,500 lbs. to 110,000 lbs. GVW -- $1 per mile Over 110,000 lbs. GVW – $1 per mile **plus** $5 per ton per mile for that weight exceedi ng 110,000 lbs. GVW Exceeding restricted axle limits -- $1 per ton per mile
6-Ton: Single Axle -- 12,000 lbs. Tandem Axle -- 24,000 lbs. 3 Axles or more -- 10,000 lbs. per axle Gross Vehicle Weight -- 80,000 lbs.	Permit Fee: $20-$70 per trip Ton Mile Fee: $5 per ton per mile for all weight exceeding 80,000 lbs. GVW Exceeding restricted axle limits -- $1 per ton per mile
5-Ton: Single Axle -- 10,000 lbs. Tandem Axle -- 20,000 lbs. 3 Axles or more -- 10,000 lbs. per axle Gross Vehicle Weight -- 80,000 lbs.	No overweight movement allowed

SINGLE UNIT FIXED LOAD VEHICLES SUCH AS TRUCK CRANES AND WORKOVER RIGS

A. Permit Fee and Ton Mile Fee for Self-Propelled Fixed Load Vehicles.

1. Permit Fee: $25 per trip

2. $1 per ton per mile for all weight in excess of restricted axle limits or in excess of legal limits on state highways in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the $1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle (see weight classification chart in section C.)

3. $5 **per ton per mile** for all movements exceeding the following gross vehicle weight limits:

   a. 105,500 lbs. GVW on unrestricted state highways, other than interstate highways, in areas where road restrictions are in force.
   b. 105,500 lbs. GVW on 8-ton highways.
   c. 105,500 lbs. GVW on 7-ton highways.
   d. 80,000 lbs. GVW on 6-ton highways.
   e. No overweight movement allowed on 5-ton highways

B. Permit Fees for Work-Over Rigs and Special Mobile Equipment Exceeding 650 but not 670 Pounds Per Inch Width of Tire.

1. Permit Fee:
   a. $50 per trip on work-over rigs up to 650 pounds per inch width.
   b. $75 per trip on work-over rigs that exceed 650 but not 670 pounds per inch width of tire.
2. The work-over rig shall be stripped to the most minimum weights.
3. A minimal number of state highway miles shall be used.
4. District engineer approval shall be obtained prior to movement when vehicle exceeds restricted axle weights by more than 5,000 pounds.
5. A validation number ending in TM must be obtained from the Highway Patrol prior to using a self-issue single trip movement approval form.
6. The ton mile shall be waived.

CERTIFICATION

I hereby certify the attached supplemental specifications effective on October 1, 2015.

/S/ 6/1/15

Bob Fode, P.E., Director
Office of Project Development

Date

North Dakota
Department of Transportation

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
REVISIONS

Effective Date: 10/01/2015

The following specifications are supplementary to the 2014 Edition of the *Standard Specifications for Road and Bridge Construction* as they apply to this Contract. Page references in this document apply to the hard bound, printed edition of the specifications (the "blue book") and the "as printed" version of the specifications on the Department's website.

101.03 ABBREVIATIONS **PAGE 8** **10/01/15**

Delete the line for "ACPA American Concrete Precast Association" and replace it with the following:

ACPA American Concrete Pipe Association

Add the following item to Section 101.03:

NPCA National Precast Concrete Association
SWPPP Storm Water Pollution Prevention Plan

101.04 DEFINITIONS **PAGE 10** **10/01/15**

Delete the definition for "Sieve" and replace it with the following:

Sieve. U.S.A. Standard Sieve, as defined in ASTM E 11. The specified percent passing for each sieve is measured by weight.

104.02 C Significant Changes to the Character of Work **PAGE 34** **10/01/15**

Delete the following paragraph in its entirety:

If the Contractor believes an alteration in the work is a significant change that necessitates a contract revision, the Contractor shall notify the Engineer in accordance with Section 104.03, "Contractor Requested Contract Revisions".

104.05 A Submission of the Claim **PAGE 37** **10/01/15**

Replace the fourth paragraph of Section 104.05 with the following:

Provide a claim submittal to the Engineer that contains, at a minimum, the following information for each claim issue included on the *Notice of Intention to File a Claim* (SFN 16743). Failure to supply the following information for each claim issue constitutes a waiver of claim for addional compensation for each submitted claim item.

105.03 B Scheduling **PAGE 45** **10/01/15**

Replace Section 105.03 B with the following:

B. Scheduling.

1. General.
In order to minimize interference with traffic operations, the Contractor, Engineer, and utility owner shall agree to a detailed schedule before starting work.

2. Utility Coordination Meeting.
If the contract requires a utility coordination meeting, arrange the meeting with the utility owners and the Engineer to occur no later than two weeks after the notice to proceed. At the meeting, provide an agenda and a tentative construction schedule for planning utility relocations and adjustments; after the meeting, publish minutes and distribute a copy to all meeting attendees.

106.02 D Aggregate Source Limitations **PAGE 58** **10/01/15**

Delete number 8 and replace it with the following:

8. In Stark County, within the 2-mile radius from the center of Section 30-137-92;

Delete number 11 and replace it with the following:

11. In Hettinger County, within the 1-mile radius from the center of Section 28-135-91;

107.17 REMOVED MATERIAL **PAGE 80** **10/01/15**

Replace Section 107.17 with the following:

107.17 REMOVED MATERIAL
Unless otherwise designated in the contract, removed material becomes the property of the Contractor.

If the Contractor determines that the material will be disposed of, the material must be disposed in one of the following ways:

A. Dispose of the material through a beneficial use. Apply for a beneficial use permit from the NDDoH by completing an *NDDOT Projects-Inert Waste Beneficial Use Application* (SFN 58981). Provide the Engineer with copies of all documents submitted to the NDDoH.

B. Dispose of the material at an approved permanent waste management facility.

C. If waste cannot be reasonably managed at a permanent waste management facility, obtain approval from the NDDoH for a variance to dispose of the inert waste at another site. Apply for a variance by completing an *NDDOT Projects-Inert Waste Disposal Variance Application* (SFN 54344). Provide the Engineer with copies of all documents submitted to the NDDoH.

   Obtain locations of permanent waste facilities, applications, and guidelines from the NDDoH, Division of Waste Management. View a list of municipal and inert waste landfills and review guidance on the NDDoH website: http://www.ndhealth.gov.

Include the cost of material disposal in the contract unit price of the relevant contract item.

108.03 D Measurement and Payment **PAGE 91** **10/01/15**

Replace Table 108-01 with the following:

Table 108-01
CPM Schedule Price Reductions

Days Late Submitting Update Schedule	Percentage Price Reduction to the Prorated Amount[1]
1	20
2	40
3	60
4	80
5	100

[1] The "prorated amount" is equivalent to the amount calculated for each update schedule submission in Section 108.03 D, Item 2.

108.06 B.1 General **PAGE 93** **10/01/15**

Replace the 6th paragraph of Section 108.06 B.1 with the following:

The Contractor's plea that the contract time was insufficient is not a valid reason for an extension of time. For calendar day and completion date contracts, the Department will not extend the contract time for delays encountered on holidays and during the period from November 15 to April 15. When the time as extended by the Department falls on a date that is a holiday, the Engineer will extend the contract time to the next business day.

109.01 J.2.b Computerized Loader Bucket Scales **PAGE 103** **10/01/15**

Delete the first paragraph and replace with the following:

Loader bucket scales may be used to weigh materials when the quantity of material included in the bid item list is less than 10,000 tons and for aggregates specified under Sections 420 "Bituminous Seal Coat", 421 "Microsurfacing", and 422 "Slurry Seal" regardless of quantity.

109.01 J.4.b(2) Hopper or Batch Scales **PAGE 105** **10/01/15**

Replace Section 109.01 J.4.b(2) with the following:

After the material has been weighed on the project scale and placed in a truck, weigh the loaded truck on a certified scale owned and operated by an entity other than the Contractor. Provide the tare weight of the truck along with the comparison weigh ticket.

109.01 J.6.a General **PAGE 106** **10/01/15**

Delete the second paragraph and replace with the following:

Document the weight of each load on a separate, sequentially numbered weigh ticket that has a maximum size of 5.5 × 8.5 inches. Provide one copy to the driver of the truck. The truck driver shall deliver the weigh ticket to the Engineer at the location where the material is incorporated into the work. The Engineer will reject loads that are not accompanied by a legible weigh ticket.

155.03 A.3 Water Measuring **PAGE 143** **10/01/15**

Replace the second paragraph in Section 155.03 A.3 with the following:

Use a water measuring system that:

- Delivers the designated quantity of water for each batch within the tolerance specified in Section 802.03 B.4, “Batching Water”;
- Automatically stops the water flow when the designated quantity has been delivered; and
- Is adjustable and has a calibrated indicator showing the quantity of water measured for each batch.

155.07 D Bridge Deck Overlay Finishing Machines **PAGE 147** **10/01/15**

Replace Section 155.07 D with the following:

D. Bridge Deck Overlays Finishing Equipment.

Use a finishing machine that is:

- Equipped with an oscillating screed or screeds with an effective weight of at least 75 pounds for each square foot of bottom face area, and provided with positive control of vertical position, the angle of tilt, and the shape of the crown. At least one oscillating screed shall be capable of consolidating the concrete to the specified density;
- Long enough to uniformly strike off and consolidate the width of lane to be paved
- Capable of forward and reverse motion under positive control;
- Travelling on rails with fully-adjustable and stable supports;
- Supported without the use of shims; and
- Not anchored to the concrete using powder actuated fasteners, unless that concrete will be subsequently overlaid.

203.02 EQUIPMENT **PAGE 163** **10/01/15**

Replace the equipment list in Section 203.02 with the following:

Equipment	Section
Vibratory Sheepsfoot/Pad Foot/Extended Pad Foot Rollers	151.01 E

203.04 B.1 Topsoil - Wetland **PAGE 165** **10/01/15**

Replace the second paragraph of Section 203.04 B.1 with the following:

Spread a minimum of 6 inches of wetland topsoil at mitigation sites and temporary wetland impact areas.

203.04 C Subcut **PAGE 165** **10/01/15**

Add the following paragraph to the end of Section 203.04 C:

Dispose of material removed from the subcut area as specified in Section 107.17, “Removed Material”.

216.06 Basis of Payment **PAGE 175** **10/01/15**

Replace Section 216.06 with the following:

Pay Item	Pay Unit
Water	M Gal

An “M Gal” is equivalent to 1,000 gallons.

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

251.03 D Seed Class **PAGE 182** **10/01/15**

Add the following footnote to Table 251-01:

[1] Substitute Thickspike or Stream bank Wheatgrass of the Critana, Banstock, Sodar, AC Polar or Elbee variety if Sideoats Grama is unavailable.

253.03 C Straw Mulch **PAGE 188** **10/01/15**

Delete the following sentence from this section:

At least 50 percent of the mulch by weight must be at least 8 inches in length.

262.04 A Installation **PAGE 201** **10/01/15**

Replace the first paragraph of Section 262.04 A with the following:

Attach anchor lines to the flotation device.

265.06 Basis of Payment **PAGE 204** **10/01/15**

Replace the first paragraph after the list of pay items with the following:

Include the cost for pipe, geosynthetic material, topsoil, and seed in the price bid for “Stabilized Construction Access”.

302.03 MATERIALS **PAGE 209** **10/01/15**

Replace table in Section 302.03 with the following:

Material	Section
Aggregates	816
Salvaged Base Course	817
Traffic Service Aggregate	816 Class 5; or 817

302.04 A.2 Gradation **PAGE 209** **10/01/15**

Replace the first paragraph in Section 302.04 A.2 with the following:

The Engineer will collect three samples for each 1,000 tons of material placed, except when more than 1,000 tons are placed in a day. If more than 1,000 tons are placed in a day, the Engineer will collect three samples for that day's placement. If the aggregate fails to meet the specified gradation, the Engineer will apply a price reduction as specified in Section 302.06 B, "Contract Price Adjustments".

302.04 C Surface Tolerance **PAGE 210** **10/01/15**

Replace Section 302.04 C with the following:

C. Surface Tolerance.
Unless one of the following surface tolerances is specified, construct the surface to within 0.08 feet of the proposed elevation.

1. Surface Tolerance Type B.
Use trimming equipment, including motor graders, equipped with automatic grade control to adjust for the cross slope and longitudinal profile. Construct the finished surface to within 0.04 feet of the proposed elevation.

Reincorporate material removed from high points during trimming into other portions of the base.

2. Surface Tolerance Type C.
Use roadbed planers to construct the finished surface. The Engineer will allow the base or surface course to be used as the grade reference when trimming shoulders. Construct the finished surface to within 0.04 feet of the proposed elevation.

Reincorporate material removed from high points during trimming into other portions of the base.

306.04 A.1 Gradation **PAGE 213** **10/01/15**

Replace the first paragraph in Section 306.04 A.1 with the following:

The Engineer will collect three samples for each 1,000 tons of material placed, except when more than 1,000 tons are placed in a day. If more than 1,000 tons are placed in a day, the Engineer will collect three samples for that day's placement. If the aggregate fails to meet the specified gradation, the Engineer will apply a price reduction as specified in Section 302.06 B, "Contract Price Adjustments".

401.03 B Tack Coat and Fog Seal. **PAGE 221** **10/01/15**

Delete Section 401.03 B and add the following:

B. Tack Coat.
Use a material from Table 401-01.

Table 401-01

Material	Section
SS-1h	818.02 F
MS-1	818.02 F
CSS-1h	818.02 E.1

When MS-1 is used it may be diluted by the supplier or the Contractor.

C. Fog Seal.
Use a material from Table 401-02.

Table 401-02

Material	Section
SS-1h	818.02 F
CSS-1h	818.02 E.1

401.04 A Application of Bitumen **PAGE 221** **10/01/15**

Delete Section 401.04 A and add the following:

A. Application of Bitumen.

1. General.
Prepare the surface by removing loose dirt and deleterious material.

Provide the Engineer with the manufacturer recommended application temperature ranges. During application, maintain the temperature of bitumen within the ranges recommended by the manufacturer.

Apply bitumen with a distributor on a compacted and stable surface. Use hand sprayers to cover irregular areas. Completely cover the area receiving the bitumen application.

If applying bitumen in multiple passes, overlap the bitumen along adjoining edges of the passes.

Protect the surfaces of structures and other roadway appurtenances against tracking and splattering.

2. Prime Coat.
Apply prime coat when the ambient air temperature is at least 40°F.

Allow the prime coat to cure a minimum of 48 hours before placing pavement.

3. Tack Coat.
Apply tack coat when the air temperature and existing mat temperature are at least 35°F.

Apply tack coat to a dry surface.

Allow tack coat to cure before applying surfacing material.

4. Fog Coat.
Apply fog coat when the ambient air temperature is at least 40°F.

Apply fog coat to a dry surface.

420.04 A General **PAGE 224** **10/01/15**

Replace Section 420.04 A with the following:

A. General.
Do not start seal work after September 1.

Allow material to cure as shown in Table 420-01 before applying seal coat materials.

Table 420-01 Curing Period	
Material Type	**Curing Period**
Prime Coat	4 days
Asphalt Cement Pavements	7 days
Emulsion Pavements	15 days

Schedule the work so that the last bitumen application of the day is sufficiently cured to allow installation of the short-term pavement marking before sunset.

420.04 D Cover Coat Material Application **PAGE 225** **10/01/15**

Replace the third paragraph with the following:

Within one minute following the application of the bitumen, spread the cover coat material uniformly over the bituminous material with an aggregate spreader. Apply cover material by hand to areas that are inaccessible to the aggregate spreader.

420.04 D Cover Coat Material Application **PAGE 225** **10/01/15**

Delete the eighth paragraph in its entirety.

430.03 F Commercial Grade Asphalt **PAGE 238** **10/01/15**

Replace the second paragraph of Section 430.03 F with the following:

The requirements of the following sections will not be applied to commercial grade asphalt:
- Section 430.04 A, “Contractor Quality Control Plan”;
- Section 430.04 B, “Engineer’s Quality Assurance Plan”;
- Section 430.04 C.2, “Determination of Specific Gravity”;
- Section 430.04 E, “QC Testing”; and
- Section 430.04 M, “Acceptance”.

430.04 D.1 General **PAGE 241** **10/01/15**

Replace the third paragraph of Section 430.04 D.1 with the following:

Submit the mix design a minimum of 10 calendar days before beginning paving operations. The Engineer will review the mix design. If the Engineer does not approve the mix design, revise the mix design and submit the revised mix design. Allow 10 calendar days for the Engineer to review a revised mix design before beginning paving operations.

430.04 D.2 Items to be Submitted **PAGE 242** **10/01/15**

Add the following item to Section 430.04 D.2:

e. If the mix contains RAP, submit a 50 pound sample of the milled material.

430.04 F Surface Preparation **PAGE 246** **10/01/15**

Replace the second paragraph of Section 430.04 F with the following:

Correct local irregularities in the existing surface before placing the first lift of bituminous material. If milling is specified, correct local irregularities after milling. Apply a tack coat to the surface before correcting the irregularities. Use the same type of mix that is required for the subsequent lift Use a pneumatic roller as specified in Section 151.01 A.3. “Self-Propelled Pnuematic-Tired Roller” to compact the mix.

430.04 G Patching **PAGE 247** **10/01/15**

Replace Section 430.04 G with the following:

G. Patching.
Remove existing broken or unstable surface material and replace that material with the same mixture specified for the next course.

Place the bituminous material in lifts not to exceed 3 inches and compact the material. Allow the patch material to cool to 130°F before placing additional material. If patching is required during the paving operation, allow the patch material to cool to 185°F before placing additional material.

430.04 H.1 General **PAGE 248** **10/01/15**

Delete the ninth paragraph of Section 430.04 H.1

430.04 I.3.c Intermediate Rolling **PAGE 250** **10/01/15**

Replace the second paragraph of Section 430.04 I.3.c with the following:

If roller tires pick up the bituminous material or there are excessive roller marks in the mat, the Engineer may allow the removal of the intermediate rolling operation if it appears to the Engineer that compaction is being achieved.

430.04 J Joints **PAGE 250** **10/01/15**

Replace Section 430.04 J with the following:

J. Joints.

1. General.
Place pavement against the surface of curbing, gutters, manholes, and similar structures uniformly near the contact surfaces so the pavement is slightly higher than the edge of the structure after compaction. Do not construct a joint on top of a joint from a previous lift.

2. Longitudinal Joints.
Construct longitudinal joints on successive lifts between 6 and 12 inches from the previous longitudinal joint.

Place and follow markings to guide the paver. Construct joints in a uniform line. Correct pavement edges that deviate from the uniform line and correct areas of the joint that vary from the intended location of the joint by more than 2 inches. Construct joints with tight seams and no visible segregation.

3. Transverse Joints.
Construct transverse joints on successive lifts a minimum of 12 feet from the previous transverse joint.

550.03 Materials **PAGE 261** **10/01/15**

Add the following to Section 550.03:

Develop a mix design with a maximum water-cement ratio of 0.40 when placing concrete with a slip form paving machine. Use the water-cement ratio shown in Section 802.01 B.2, “Concrete Class Designation” for all other paving methods.

550.04 H.1.d Final Surface Finish **PAGE 268** **10/01/15**

Replace Section 550.04 H.1.d with the following:

d. Final Surface Finish.

(1) General.
Uniformly texture the surface by dragging a seamless strip of stiff-fiber artificial grass carpet longitudinally along the full width of the pavement in a single pass.

Use and maintain a taut string line for operating the carpet drag. Attach the leading edge of the carpet drag to a bridge. If the Engineer determines it is not feasible to use a bridge or string line, other texturing methods will be allowed.

Maintain a clean carpet free of encrusted concrete.

Provide a minimum texture depth of 0.031 inches.

(2) Roadways with Speed Limits Less than 45 MPH.
The Engineer will test the texture achieved by the carpet drag in accordance with ASTM E 965 and the Field Sampling and Testing Manual. The Engineer will determine the test location.

If three or more lots have texture depths less than 0.031 inches but greater than or equal to 0.025 inches, perform diamond grinding on those lots.

Perform diamond grinding any lot having a texture depth of less than 0.025 inches.

Perform grinding as specified in Section 550.04 M.4, “Grinding.”

The Engineer will determine the limits of any failing test by running additional tests at 100 foot intervals before and after the failing test. The Engineer will determine the location of the additional tests.

(3) Roadways with Speed Limits 45 MPH or Greater.
Run a clean, metal tine longitudinally along the surface immediately following the carpet drag. Exclude areas within 3 inches of the edge of the slab and longitudinal joints. Run the tine continuously across transverse joints.

Use a tine that provides:
- 1/8 inch ±1/64 inch groove width;
- 3/16 inch ±1/16 inch groove depth; and
- 3/4 inch spacing of between grooves.

If the concrete has becomes too stiff to receive the metal tine finish, use diamond bladed equipment to produce the longitudinal grooves.

550.04 I.3 Impervious Membrane Cure **PAGE 271** **10/01/15**

Replace the first paragraph of Section 550.04 I.3 with the following:

Use a curing compound that meets the requirements of Section 810.01 B.2, “Type 2, Class B”.

570.03 A General **PAGE 281** **10/01/15**

Add the following item to the table:

Impervious Membrane Cure	810.01 B.1

570.03 B.2.a Concrete **PAGE 281** **10/01/15**

Replace Section 570.03 B.2.a with the following:

a. Concrete.
Use Class AE concrete with cement that meets the requirements of AASHTO M 85, Type I or Type IA for spall repairs.

570.03 D Curing Compound **PAGE 281** **10/01/15**

Delete Section 570.03 D.

570.04 A.1.b Full Depth Repairs **PAGE 282** **10/01/15**

Replace Section 570.04 A.1.b with the following:

b. Full Depth Repairs.
Use the lift out method to remove concrete in full depth repair areas with minimal disruption to the subgrade and without damage to the remaining concrete. Do not operate equipment, other than compaction equipment, in areas where concrete has been removed. Fill voids deeper than 1 inch with aggregate and compact the material to the level of the existing subgrade.

Place concrete for repairs less than 100 feet long the same day that removals are initiated. Place concrete for repairs longer than 100 feet within 48 hours of initiating removals. Dampen the faces of existing concrete before placing new concrete.

Place, consolidate, finish, and cure concrete according to the following portions of Section 550.04, "Construction Requirements":

- 550.04 C, "Roadbed Condition";
- 550.04 D, "Placing and Spreading Concrete";
- 550.04 E, "Placing Reinforcing Steel and Tie Bars";
- 550.04 F, "Uncontrolled Cracking";
- 550.04 G, "Joints";
- 550.04 H, "Finishing Concrete", except parts 1.d, "Final Surface Finish" and 1.e, "Imprinting Pavement";
- 550.04 J, "Removing Forms";
- 550.04 K, "Sealing Joints"; and
- 550.04 L, "Opening to Traffic".

Provide finished concrete that is flush with all adjacent pavement surfaces. Before the concrete sets, check the repair utilizing a 10 foot straight edge and correct areas that deviate by 1/8 inch or greater.

Texture the repair by dragging a carpet of artificial grass longitudinally over the repaired area.

If repairs involve multiple lanes, fill the gap between the lane under repair and the existing concrete with cold bituminous material. Remove this material before making the repair to the adjacent lane.

(1) Repairs One Lane Wide.
Use a bond breaker along the centerline joint. Tie bars are not required on repairs that are one lane wide.

When the repair falls in a ramp, restore the longitudinal joints crossing the repair, but do not use tie bars.

(2) Repairs Wider Than One Lane.
Before placing the concrete in the second lane, install 30 inch #5 tie bars in the longitudianl joint using the original tie bar pattern. Drill holes for the bars and secure the bars in the holes using epoxy.

(3) Impervious Membrane Cure.
Use a curing compound that meets the requirements of Section 810.01 B.1, “Type 2”.

Apply the cure at a minimum rate of 1 gallon per 150 square feet of pavement in one or two applications. If applying two coats, apply the second application within 30 minutes of the first application.

Protect joints that require sealing from infiltration of the curing compound.

Immediately cover the exposed sides of the concrete pavement with curing compound if removing forms exposes curing concrete before the expiration of the curing period.

Immediately reapply curing compound to damaged areas within the curing period.

570.04 A.2.c Dowel Bars **PAGE 284** **10/01/15**

Replace the first paragraph of Section 570.04 A.2.c with the following:

Drill 1-3/8 inch diameter holes using a rigid frame-mounted drill. Clean the hole, inject epoxy into the hole, and insert dowels.

570.04 A.3.a Concrete Removal **PAGE 285** **10/01/15**

Replace the third paragraph of Section 570.04 A.3.a with the following:

If existing reinforcing steel is damaged or bent within the 18 inch lap area, replace the damaged reinforcing steel.

570.04 C Grinding **PAGE 285** **10/01/15**

Replace the first paragraph of Section 570.04 C with the following:

Allow new concrete and dowel bar retrofit patch material to cure for a minimum of 24 hours before grinding.

570.04 C.6 Slurry Removal **PAGE 286** **10/01/15**

Replace Section 570.04 C.6 with the following:

6. Slurry Removal.
Continuously collect all slurry or residue resulting from the grinding operation.

In areas with speed limits of 45 mph or less and in areas with curb and gutter, dispose of slurry as specified in Section 107.17, “Removed Material”.

In areas with speeds greater than 45 mph and without curb and gutter, slurry may be place on the foreslope of the roadway. Prevent slurry from entering pipes, culverts, storm drains, ravines, streams, waterways, wetlands, and all other water conveyances. Install erosion control features as necessary to prevent contamination, or dispose of slurry as specified in Section 107.17, “Removed Material”.

570.06 BASIS OF PAYMENT **PAGE 289** **10/01/15**

Delete the following paragraph from Section 570.06:

Include all costs for saw cuts, steel reinforcing, bar supports, tie bars, and joint sealing in the unit price bid for "__Inch Concrete Pavement Repair - Full-Depth _____".

602.04 J Penetrating Water Repellent Treatment of Concrete Surfaces **PAGE 307**
10/01/15

Replace section 602.04 J with the following:

J. Penetrating Water Repellent Treatment.
Apply penetrating water repellant to the driving surface of the bridge deck after barrier forms have been removed.

Before treating the deck, use sandblasting or water washing equipment to clean the surfaces of material that might inhibit the coverage and penetration of the solution.

Prepare the deck by applying pre-treatment cleaning agents before the use of water washing cleansing methods. Add detergent to the cleansing water, if necessary. After washing, rinse with clear water.

Use solvents and hand tools to remove bonded foreign materials.

Use a cleaning process that does not remove or alter the existing deck finish and does not expose the coarse aggregate.

Before treatment, allow the deck to dry to meet the requirements of the repellent manufacturer.

Apply penetrating water repellent treatment solution when the air or concrete surface temperature is 40°F and rising. Use airless application equipment with 15 to 40 psi application pressure. Apply treatment solution at the rate recommended by the solution manufacturer.

602.04 K.1 General **PAGE 307** **10/01/15**

Replace Section 602.04 K.1 with the following:

1. General.
When shown in the plans, apply membrane and primer in dry weather and when the air temperature is above 40°F. Apply to surfaces that are dry, clean, free of sharp protrusions and above 40°F.

604.03 B.3 Trial Mix **PAGE 310** **10/01/15**

Replace the "AASHTO T 23" test requirement with "ND T 23:

604.03 E.1 Concrete **PAGE 310** **10/01/15**

Replace the "AASHTO T 23" test requirement with "ND T 23:

606.04 A Design and Manufacture **PAGE 314** **10/01/15**

Replace the second paragraph in Section 602.04 A with the following:

Use an ACPA or NPCA certified plant in the construction.

702.06 Basis of Payment **PAGE 355** **10/01/15**

Replace the Table 702-01 with the following:

Table 702-01

Payment for Mobilization

Original Contract Amount Earned	Payment will be the Lesser of:	
	Mobilization Bid Amount	Original Contract Amount
5%	25%	2.5%
10%	50%	5.0%
50%	100%	7.5%
75%	100%	10.0%

704.04 B Traffic Control Device Condition Classifications **PAGE 359** **10/01/15**

Replace all instances of “ATSAA” in Section 704.04 B with “ATSSA”.

704.04 M Protection Vehicle with Truck Mounted Attenuation Device (TMA) **PAGE 366** **10/01/15**

Replace the last paragraph of 704.04 M with the following:

Equip the protection vehicle with an advance warning flashing or sequencing arrow panel conforming to Section 704.03 M, “Advance Warning Flasher or Sequencing Arrow Panel” and the MUTCD.

704.04 O Traffic Control for Uneven Pavement **PAGE 367** **10/01/15**

Replace all instances of “Sign W20-52-24” in Section 704.04 O with “W20-52-54”.

Change the title of Section 704.04 O.3.b to “Uneven Pavement Greater Than 2 Inches.”

706.02 B Aggregate Laboratory **PAGE 372** **10/01/15**

Replace Section 706.02 B with the following:

B. Aggregate Laboratory.
Place the laboratory at a location acceptable to the Engineer. The Engineer will have the full control and the exclusive use of the laboratory.

Provide a laboratory with a minimum floor area of 230 square feet, minimum exterior width of 8 feet, and a minimum ceiling height of 7 feet.

Partition the building into a minimum of two rooms, a smaller room having a floor area of approximately 70 square feet.

Provide a workbench with a length of 7 feet in the smaller room:

Provide the following equipment in the larger room:

1. Mechanical shaker capable of receiving 6 trays that have a screen size of 14 inches by 14 inches and the following compatible sieves:
   - 1-1/2 inch;
   - 1-1/4 inch;
   - 1 inch;
   - 3/4 inch;
   - 1/2 inch;
   - 3/8 inch;
   - No. 4; and
   - An enclosed dust pan.
2. Mary Ann shaker capable of being adjusted to receive 8 and 12 inch diameter sieves;
3. Splitter with a maximum hopper capacity of 0.6 cubic feet;
4. Splitter with a minimum hopper capacity of 1.0 cubic feet; and
5. An exhaust fan capable of changing the air in the room every minute.

709.04 C Geosynthetic Geogrid (Type G) **PAGE 376** **10/01/15**

Replace Section 709.04 C with the following:

C. Geosynthetic Geogrid (Type G).

Unroll geogrid parallel to the centerline of the road. Do not drag the geogrid across the underlying material. Use geogrid widths that produce overlaps of parallel rolls at the centerline and at the shoulders and so that no overlaps are required along wheel paths.

Overlap geogrid a minimum of 30 inches at all splices and joints when placing on subgrade. Overlap geogrid a minimum of 12 inches at all splices and joints when placing on base.

Construct overlaps at the end of a roll so the previous roll laps over the subsequent roll in the direction of the cover material placement. Mechanically tie transverse joints to maintain the minimum overlap. Place pins, staples, or small piles of aggregate to maintain the geogrid position before placement of cover material.

Stagger end overlaps at least 10 feet from other end overlaps in parallel rolls. Cut or increase overlaps to conform to curves.

Patch damaged areas of geogrid. Place a patch that overlaps the damaged area by 36 inches on all sides. Mechanically tie the patch to the underlying grid.

Place the first lift of material over geogrid installed on subgrade to a depth of 10 inches of loose material. Place the first lift of material over geogrid installed on base to a depth of 6 inches of loose material.

Use low ground pressure equipment to spread the initial lift of material. If rutting occurs, fill the ruts with additional material before placing the subsequent lift. Do not blade out ruts. Do not turn construction equipment on the first layer of material.

714.04 A.1 Bedding **PAGE 379** **10/01/15**

Delete the first paragraph from Section 714.04 A.1.

714.04 A.6 Connection to Manholes, Inlets, and Pipes **PAGE 380** **10/01/15**

Replace Section 714.04 A.6 with the following:

6. Connection to Manholes, Inlets, and Pipes.
If connections are required to a manhole, inlet barrel, or pipe entrance, connect pipe by cutting the opening and grouting in the connecting pipe.

714.04 A.7 Compaction Control for Aggregate **PAGE 380** **10/01/15**

Replace Section 714.04 A.7 with the following:

7. Compaction Control for Aggregate.
Compact aggregate according to Section 203.04 E.2, “Compaction Control, Type A” The moisture content of the aggregate at the time of compaction shall be not less than 2.0 percentage points below, nor more than 3.0 percentage points above the optimum moisture content.

Compact aggregate for approach pipes according to the conduit manufacturer’s recommendation

Use a maximum lift thickness of 6 inches.

714.04 A.8 Compaction Control for Non-Aggregate Material **PAGE 380** **10/01/15**

Replace Section 714.04 A.8 with the following:

8. Compaction Control for Non-Aggregate Material.
If Common Excavation Type A is specified, follow the compaction requirements in Section 203.04 E.2, “Compaction Control, Type A”. If Common Excavation Type B is specified, follow the compaction requirements in Section 203.04 E.3, “Compaction Control, Type B”.

Compact material for approach pipes according to the conduit manufacturer’s recommendations.

748.03 MATERIALS **PAGE 393** **10/01/15**

Add the following item to the table:

Impervious Membrane Cure	810.01 B.1 or 810.01 B.2

750.03 MATERIALS **PAGE 395** **10/01/15**

Add the following item to the table:

Impervious Membrane Cure	810.01 B

Replace the paragraph directly after the table with the following:

For imprinted concrete use any size coarse aggregate specified in Section 802.01 C.2, “Coarse Aggregate”. Produce a mix that consists of 60 percent fine aggregate and 40 percent coarse aggregate.

754.04 D.2 Anchor for Telescoping Perforated Tubes Supports **PAGE 403** **10/01/15**

Replace the last two paragraphs in Section 754.04 D.2 with the following:

If installation is in either concrete or bituminous material, omit the soil plate or use a surface mount anchor base.

Core concrete and bituminous surfacing before installing the anchor unit and fill the cored area with like material that matches the surrounding surfacing.

754.04 F Removing and Resetting Signs and Supports **PAGE 407** **10/01/15**

Replace the Section 754.04 F with the following:

F. Removing and Resetting Signs and Supports.

1. General.
Remove and reset existing signs and supports as specified. Stockpile all signs and supports not to be reset at designated locations within the project limits. The Engineer will arrange to have stockpiled signs removed from the project limits and delivered to the Department’s facility.

Replace removed or reset signs and supports that are damaged during removing, resetting, or stockpiling at no additional cost to the Department.

Remove existing signs and supports as construction progresses, and immediately reset or install new signs.

The Engineer will allow the temporary reset of existing signs, or the temporary installation of new signs. Include the cost of installing and resetting signs temporarily in the price bid for other items.

2. Reset Sign Panel.
Remove sign panels from existing supports. Reinstall sign panels, angles, stringers, and steel channels on new supports.

Provide all necessary brackets and hardware to attach sign panels, angles, stringers, and steel channels on new supports.

754.04 I Overlay Panel Sign Refacing **PAGE 407** **10/01/15**

Replace the second paragraph of Section 754.04 I with the following:

Remove the legend, border, and symbol on those signs that have demountable copy and remove any existing sign overlays and place overlay panels on the signs. Do not remove direct applied sheeting legends, borders, and symbols. Direct apply the new legends, borders, and symbols to the overlay panels and install on the existing signs.

754.04 J Auxiliary Signs **PAGE 408** **10/01/15**

Replace the Section 754.04 J with the following:

J. Auxiliary Signs.
Install auxiliary signs used with route markers with the same background color as the route markers:

- Interstate, Blue;
- Interstate Business Loop, Green;
- State, White;
- US, White; and
- County, Blue.

754.05 METHOD OF MEASUREMENT **PAGE 408** **10/01/15**

Add the following to Section 754.05:

D. Reset Sign Panel.
The Engineer will measure the item “Reset Sign Panel” by the number of locations a sign or sign assembly has been reset.

E. Reset Sign Support.
The Engineer will measure the item “Reset Sign Support” by each leg of a sign support that has been reset.

760.03 Materials **PAGE 410** **10/01/15**

Replace Section 760.03 with the following:

760.03 MATERIALS
Use one of the following materials when applying a fog coat to rumple strips:

- SS-1h, Section 818.02 F, “Anionic Emulsified Asphalt”;
- MS-1 Section 818.02 F, “Anionic Emulsified Asphalt”; or
- CSS-1h Section 818.02 E.1 “Cationic Emulsified Asphalt”.

When MS-1 is used it may be diluted by the supplier or the Contractor.

760.04 F Traffic Control **PAGE 411** **10/01/15**

Replace Section 760.04 F with the following:

F. Traffic Control.

1. **General.**
   Use a TMA as specified in Section 704.04 M, “Protection Vehicle with Truck Mounted Attenuation Device (TMA)”.

2. **Centerline Rumble Strip Installation.**
   Provide flaggers and 2 sets of the required flagger signing for each direction of travel. Ensure that at least one set of the required flagger signing is in place in each direct of travel whenever work centerline installation is performed. Limit the work area to a maximum of 3 miles.

760.05 METHOD OF MEASUREMENT **PAGE 411** **10/01/15**

Add the following paragraph to the end of Section 760.05:

The Engineer will measure flagging and traffic control signs as specified in Section 704.05, “Method of Measurement”.

760.06 BASIS OF PAYMENT **PAGE 411** **10/01/15**

Add the following paragraph after the list of pay items in Section 760.05:

Flagging and traffic control signs will be paid for as specified in Section 704.06, “Basis of Payment”.

762.04 A.4.c Grooves for Epoxy Paint **PAGE 414** **10/01/15**

Replace the “Depth” row of Table 762-02 with the following:

Depth	45 to 55 mils

762.04 D.2 Short-Term Pavement Marking – Type NR (Non-Removable) **PAGE 418** **10/01/15**

Replace the second paragraph of Section 762.04 D.2 with the following:

Place the short term pavement markings at the rate specified in Section 762.04 C.2.b, “Rate of Application” with the following exception:

Exception: When the permanent pavement marking is specified as epoxy paint, apply the short term pavement marking at a thickness of 10 mils.

762.04 D.3 Short-Term Pavement Marking – Type R (Removable) PAGE 419 10/01/15

Replace Section 762.04 D.3 with the following:

3. **Short-Term Pavement Marking – Type R (Removable).**
   Install Type R markings when the air and pavement temperatures are at a minimum of 50°F and expected to remain above 50°F.

   If the air or pavement temperature falls below 50°F during installation, Type NR markings may be installed as specified in Section 762.04 D.2, "Short-Term Pavement Markings – Type NR (Non-Removable)". Install Type R markings once the specified temperatures exist.

Remove Type R markings once they are no longer necessary for traffic control operations. If Type NR markings were substituted for Type R markings, remove the Type NR markings using a method that does not leave a scar on the pavement.

762.06 Basis of Payment PAGE 419 10/01/15

Add the following to the end of the first paragraph:

If Type NR markings are substituted for Type R markings due to temperature requirements, the markings will be paid for at the contract unit price for Type R markings.

766.04 CONSTRUCTION REQUIREMENTS PAGE 425 10/01/15

Replace Section 766.04 with the following:

766.04 CONSTRUCTION REQUIREMENTS

A. General.
The mailbox owner will furnish a postal service approved mailbox. Install the furnished mailbox on the new support system.

B. Temporary Relocation.
If construction activities require the removal of the support system and delayed installation of the new support system, reset the existing support system at a location approved by the Engineer and postal service.

If construction activities require the removal of the support system and delayed installation of the new support system, relocate mailboxes to a location approved by the Engineer and postal service.

If existing mailboxes meet NCHRP 350 or MASH requirements, they may be reset adjacent to the roadway. If existing mailboxes do not meet NCHRP 350 or MASH requirements perform one of the following actions:

- Place them outside the clear zone;
- Place them on a 4 × 4 inch post; or
- Reset them using assemblies shown in the plans.

After construction has progressed to allow permanent installation, install the mailbox assemblies and mailboxes at the specified locations.

770.04 D.1 General **PAGE 428** **10/01/15**

Add the following to the end of Section 770.04 D.1:

Install duct seal on all conduits containing cables at controller cabinets, traffic signal bases, and pull boxes.

772.03 D Wiring Diagrams **PAGE 434** **10/01/15**

Replace the first paragraph with the following:

At the time the cabinet and control equipment is accepted, furnish a traffic signal cabinet wiring diagrams showing all circuits and parts in detail. Place the wiring diagram in the signal cabinet and submit one PDF copy to the Engineer.

772.04 A General **PAGE 435** **10/01/15**

Replace the second paragraph with the following:

Provide and bear all costs for the electrical service necessary to operate and maintain the traffic signal system until the system is accepted as specified in Section 772.04 N.3, “Supplemental Inspections and Final Acceptance”.

772.04 E.8 Final Testing **PAGE 439** **10/01/15**

Replace Section 772.04 E.8 with the following:

After installing sealer, perform the tests specified in Section 772.04 E.6, “Initial Testing”. Record the test results on SFN 60844 *Traffic Signal Loop Detector Test Report* and submit the form to the Engineer.

772.04 G Traffic Signal Standards and Combination Signal and Light Standards **PAGE 439**
10/01/15

Replace number 3 with the following:

Install and tighten the anchor bolts as specified in Section 754.04 D.5, “Overhead Sign Structures”.

772.04 N Tests and Acceptance **PAGE 442** **10/01/15**

Replace 772.04 N with the following:

1. **General.**
   Furnish all instruments and personnel required for testing and record test results. If a subcontractor performed electrical work, ensure the subcontractor is present during testing and inspection.

   The Engineer will perform the initial and final inspections when:
   - Winds are 30 mph or less;
   - Ambient temperature is 15°F or greater; and

– It is not raining or snowing.

a. Malfunction Management Unit Test.
Before uncovering the signal heads, perform a malfunction management unit test. Record the test results on SFN 60836 *Traffic Signal Malfunction Management Unit Test* and submit the results to the Engineer.

b. Ground Test.
Before opening to traffic, perform a ground test. The maximum allowable resistance at the controller cabinet is 10 Ohms. The maximum allowable resistance at each traffic signal standard is 25 Ohms. Record and submit the test results on SFN 60834, *Traffic Signal Ground Test*.

2. Initial Inspection.
After the signal system is operational and open to traffic, submit a request to schedule the initial inspection. The system must be fully operational for a minimum of 15 days before the Engineer will perform the initial inspection. The Engineer will record the inspection results on form SFN 59867, *Traffic Signal Inspection* Checklist or SFN 60845 *Flashing Beacon Inspection Checklist*. Copies of completed forms will be sent to the Contractor.

3. Supplemental Inspections and Final Acceptance.
After performing corrections, submit a request for a supplemental inspection. The Engineer will perform a supplemental inspection within 30 days of receiving the request.

If this inspection discloses any unsatisfactory items, the Engineer will provide the Contractor with a written list of items that require correction. After correcting the items, request another supplemental inspection.

If the Engineer determines that the work is complete, the signal system must operate for 14 consecutive days without interruption from defective equipment or improper workmanship.

If the signal system fails within the 14 days, make necessary repairs. After repairs are complete, request another supplemental inspection.

If the signal system operates for 14 consecutive days without interruption from defective equipment or improper workmanship, the Engineer will consider the last supplemental inspection as the final inspection and will accept the signal system.

802.01 A.1 Development **PAGE 453** **10/01/15**

Replace the second paragraph with the following:

Design a mix that will attain a compressive strength of 3,000 psi after 7 days or a flexural strength of 450 psi after 7 days. Measure compressive strength according to AASHTO T 22 and flexural strength according to AASHTO T 97. Apply a correction factor of 0.92 when using 4 inch by 8 inch concrete cylinders.

802.01 C.2 Coarse Aggregate **PAGE 454** **10/01/15**

Replace Table 802-02 with the following:

Table 802-02
Miscellaneous Coarse Aggregate Properties

Test	Method	Max. Percent by Weight of the Plus No. 4 fraction
Shale	NDDOT 3	0.7
Iron oxide particles	NDDOT 3	4.0[1]
Lignite and other coal	NDDOT 3	0.5
Soft Particles (Excluding Shale, Iron oxide particles and Lignite and other coal)	NDDOT 3	2.5
Thin or Elongated Pieces	NDDOT 3	15
L.A. Abrasion	AASHTO T 96	40.0
Soundness (Sodium Sulfate)	AASHTO T 104	12

[1] For concrete for spall repairs and bridge deck overlays, the maximum iron oxide particles shall be 2.0 percent.

802.01 C.3 Fine Aggregate **PAGE 454** **10/01/15**

Replace the second paragraph of Section 802.01 C.3 with the following:

Test fine aggregates in accordance with AASHTO T 21. If the results of the analysis are darker than the standard color, determine the compressive strength of mortar mixed using the aggregate in accordance with AASHTO T 71. If the results of the AASHTO T 71 test result in a relative strength less than 95 percent, do not use the fine aggregate.

810.01 B Liquid-Membrane-Forming Compounds **PAGE 464** **10/01/15**

Add the following to the end of Section 810.01 B:

3. **Curing Compound for Pigmented Concrete.**
   Use a curing compound when curing pigmented concrete that meets the requirements of ASTM C 309 Type 1-D.

816.04 AGGREGATE FOR MICRO SURFACING **PAGE 467** **10/01/15**

Replace Section 816.04 with the following:

816.04 AGGREGATE FOR MICRO SURFACING

A. General.
Use aggregate that is manufactured crushed stone such as granite, slag, limestone, or other high quality aggregate or combination thereof.

Before stockpiling aggregate, perform the tests specified in Table 816-03.

Table 816-03

Test	Test Method	Requirement
Soundness of Aggregates by Use of Sodium Sulfate	AASHTO T 104	15% Max
Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine[1]	AASHTO T 96	30% Max
Deleterious Substances	ND T 176	60 or Higher

[1] Perform the AASHTO T 96 test on the parent aggregate

B. Mix Design.

Develop a mix design using aggregate that meets the requirements of Table 816-04. Establish mix design target values for each sieve and submit the mix design before beginning placement operations.

Table 816-04
Aggregate Gradation for Development of Mix Design

SIEVE SIZE	TYPE II %PASSING	TYPE III %PASSING
3/8”	100	100
#4	90 – 100	70 – 90
#8	65 – 90	45 – 70
#16	45 – 70	28 – 50
#30	30 – 50	19 – 34
#50	18 – 30	12 – 25
#100	10 – 21	7 – 18
#200	5 – 15	5 – 15

C. Stockpile Tolerances.

The mix design target values will be used for acceptance of material. Gradation tests may vary from the mix design target values based on the stockpile tolerance shown in Table 816-05. The percent passing each sieve for gradation tests may not fall outside the gradation limits specified in Table 816-04.

Table 816-05

SIEVE SIZE	STOCKPILE TOLERANCE
3/8”	-
#4	± 5%
#8	±5%
#16	±5%
#30	±5%
#50	±4%
#100	±3%
#200	±2%

D. Acceptance.

1. Stockpile Testing.

Perform a gradation test in accordance with ND T 11 and ND T 27 for every 500 tons of material produced and placed in the stockpile. Also perform test ND T 176 when performing gradation tests. Submit the test results to the Engineer.

The Engineer will perform acceptance testing. If the result of the Engineer’s testing lead to rejection of the stockpile, additional material may be blended with the stockpiled material so that

the stockpile meets the requirements. The Engineer will resample and retest for both gradation and deleterious substances to determine if the stockpiled material will be accepted.

If choosing to blend additional material into the stockpile, use additional material that meets the requirements of Table 816-06. After blending, develop and submit a new mix design.

2. Gradation.
The Engineer will obtain 5 independent samples from the stockpile and perform a gradation analysis in accordance with ND T 11 and ND T 27. If the average gradation for each sieve is within the stockpile tolerance of the mix design target values, the Engineer will accept the material.

If the stockpile is rejected, additional material may be blended with the stockpiled material to obtain the required gradation. The Engineer will resample and retest to determine if the stockpiled material will be accepted.

If choosing to blend additional material into the stockpile, use additional material that meets the requirements of Table 816-03. After blending, develop and submit a new mix design.

3. Deleterious Substances.
The Engineer will determine the amount of deleterious substances in the aggregate using the same samples obtained in Section 816.05 D.2, "Gradation". If the average of the test results is 60 or higher, the Engineer will accept the material.

816.05 AGGREGATE FOR SLURRY SEAL PAGE 469 10/01/15

Replace Section 816.05 with the following:

816.05 AGGREGATE FOR SLURRY SEAL

A. General.
Use aggregate that is manufactured crushed stone such as granite, slag, limestone, or other high quality aggregate or combination thereof. Use aggregate with 100 percent of the parent aggregate larger than the largest stone in the specified gradation.

Before stockpiling aggregate, perform the tests specified in Table 816-06.

Table 816-06

Test	Test Method	Requirement
Soundness of Aggregates by Use of Sodium Sulfate	AASHTO T 104	15% Max
Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine[1]	AASHTO T 96	35% Max
Deleterious Substances	ND T 176	60 or Higher

[1] Perform the AASHTO T 96 test on the parent aggregate

B. Mix Design.
Develop a mix design using aggregate that meets the requirements of Table 816-07. Establish mix design target values for each sieve and submit the mix design before beginning placement operations.

Table 816-07
Aggregate Gradation for Development of Mix Design

SIEVE SIZE	TYPE II %PASSING	TYPE III %PASSING
3/8”	100	100
#4	90 – 100	70 – 90
#8	65 – 90	45 – 70
#16	45 – 70	28 – 50
#30	30 – 50	19 – 34
#50	18 – 30	12 – 25
#100	10 – 21	7 – 18
#200	5 – 15	5 – 15

C. Stockpile Tolerances.

The mix design target values will be used for acceptance of material. Gradation tests may vary from the mix design target values based on the stockpile tolerance shown in Table 816-08. The percent passing each sieve for gradation tests may not fall outside the gradation limits specified in Table 816-07.

Table 816-08

SIEVE SIZE	STOCKPILE TOLERANCE
3/8”	-
#4	± 5%
#8	±5%
#16	±5%
#30	±5%
#50	±4%
#100	±3%
#200	±2%

D. Acceptance.

1. Stockpile Testing.

Perform a gradation test in accordance with ND T 11 and ND T 27 for every 500 tons of material produced and placed in the stockpile. Also perform test ND T 176 when performing gradation tests. Submit the test results to the Engineer.

The Engineer will perform acceptance testing. If the result of the Engineer’s testing lead to rejection of the stockpile, additional material may be blended with the stockpiled material so that the stockpile meets the requirements. The Engineer will resample and retest for both gradation and deleterious substances to determine if the stockpiled material will be accepted.

If choosing to blend additional material into the stockpile, use additional material that meets the requirements of Table 816-06. After blending, develop and submit a new mix design.

2. Gradation.

The Engineer will obtain 5 independent samples from the stockpile and perform a gradation analysis in accordance with ND T 11 and ND T 27. If the average gradation for each sieve is within the stockpile tolerance of the mix design target values, the Engineer will accept the material.

3. **Deleterious Substances.**
The Engineer will determine the amount of deleterious substances in the aggregate using the same samples obtained in Section 816.05 D.2, “Gradation”. If the average of the test results is 60 or higher, the Engineer will accept the material.

817.01 D.2.a Extraction Test Method **PAGE 472** **10/01/15**

Replace the second paragraph of Section 817.01 D.2.a with the following:

The Engineer will determine the percentage of asphalt binder in the stockpile in accordance with AASHTO T 164 and average the results obtained from the three samples. The material will be rejected if any single sample has a value greater than 4.0 percent or the average extraction is greater than 3.5 percent. If the stockpile is rejected, the stockpiled material may be blended with other material.

818.03 Bituminous Materials for Micro Surfacing **PAGE 475** **10/01/15**

Replace Table 818-01 with the following:

Table 818-01

Test	Specification	Requirement
Settlement and Storage Stability of Emulsified Asphalts, 24-h	AASHTO T 59	1% Minimum
Distillation of Emulsified Asphalt[1]	AASHTO T 59	62% Minimum
Tests on Emulsified Asphalt Residue		
Softening Point of Bitumen (Ring and Ball Apparatus)	AASHTO T 53	135°F Minimum

[1] Hold the temperature for this test at 350°F for 20 minutes.

830.01 CONCRETE PIPE AND DRAINAGE STRUCTURES **PAGE 480** **10/01/15**

Replace the second paragraph of Section 830.01 with the following:

Use an ACPA or NPCA certified plant in the construction.

856.01 A General **PAGE 495** **10/01/15**

Replace the “Slope Gradient” row in Table 856-01 with the following:

Slope Gradient Application	≤ 3H:1V	< 3H:1V - 2H:1V	≤ 2H:1V	< 2H:1 - 1.5H:1V

860.02 A Barbed Wire **PAGE 501** **10/01/15**

Replace Section 860.02 A with the following:

A. Barbed Wire.
Provide barbed wire that meets the requirements of AASHTO M 280. Provide wire that has a minimum gage of 12½ and at least 2 point barbs.

860.02 B Woven Wire **PAGE 501** **10/01/15**

Replace Section 860.02 B with the following:

Provide woven wire that meets the requirement of AASHTO M 279, Design Number 939-6-12½.

862.04 C 3-Cable **PAGE 505** **10/01/15**

Replace the Section 862.04 C with the following:

C. 3-Cable.
Provide round treated timber posts used for three-cable guardrail that are between 4.5 and 6.5 inches in diameter.

880.02 B.2 Epoxy Resin Material **PAGE 509** **10/01/15**

Replace Section 880.02 B.2 with the following:

2. Color.
Provide material that meets the requirements of Table 880-03 and 880-04 when tested in accordance with ASTM D 2805.

Table 880-03
CIE Chromaticity limits using illuminant "C" for Yellow Epoxy

x	0.470	0.485	0.520	0.048
y	0.440	0.460	0.450	0.420

Table 880-04
Daylight Directional Reflectance (Y)

Color	Minimum Value
White	83
Yellow	50

896.10 Controller Cabinet **PAGE 557** **10/01/15**

Replace the 3 with the following:

3. Provide a metal weatherproof cover that blocks air flow in cold weather, and adequately covers the fan vent assembly and the louver on the door. Install a gasket to the cover and attach the cover to the inside of the cabinet. Construct the cover of the same material as the cabinet.

   Provide a weep hole in the bottom loop on each end of the cabinet full-size door.

Build the cabinet to contain the following items:

- All items of control equipment specified in these Specifications.

- Provide a thermostatically-controlled minimum 250 watt strip-type heater mounted on the full-size door cover with a protective wire-mesh shield installed around the heater. Use a heavy-duty thermostat capable of being set within a temperature range of 30°F to 90°F. Activate the power to the fan and to the heater using a three-position toggle switch located on the auxiliary switch panel.

  Use a switch that operates vertically up and down with the:

  - Up position being FAN (power to the fan on and power to the heater off);
  - Center position being OFF (power to both the fan and the heater off); and
  - Down position being HEATER (power to the heater on and power to the fan off).

  Provide an electrical three-prong twist lock-type plug between the switch and the heater. Mount the heater thermostat on the auxiliary switch panel. Make the connection to the heater with stranded copper wire having 200°C insulation and noninsulated, solderless terminals.

- Provide three duplex receptacles with ground fault interrupter. Fuse the receptacles ahead of the main circuit breaker.

- Provide a switched lamp socket, fuse the lamp socket ahead of the main circuit breaker.

- Include the following in the maintenance switches inside the cabinet:

  - Stop time control.
  - Timer power.
  - Flash.
  - Vehicle detector input for each phase in use and all future phases.
  - Pedestrian input for each phase in use and all future phases.

10/1/2014

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
PRICE SCHEDULE FOR MISCELLANEOUS ITEMS (PS-1)

The Contractor agrees to accept the following unit prices for each listed item of work and or material when no project contract unit price exists for that item. Each price listed will be full compensation for the cost of labor, material and equipment necessary to provide the item of work and/or material, complete in place, including (but not limited to) royalty, disposal of unsuitable material, equipment rental, sales tax, use tax, overhead, profit, and incidentals.

Each listed item is referenced to the Standard Specifications by Section number and Section name.

SECTION NO.	SECTION NAME	ITEM NAME	PRICE PER ITEM
107.08	Haul Roads	Water	$27 per M Gal
107.08	Haul Roads	Bitumen for Mix	Invoice Price [1] + 10%
107.08	Haul Roads	Bituminous Mix	$42 per Ton [2]
107.08	Haul Roads	Aggregate Base	$17 per Ton [2]
203.01 B	Rock Excavation	Rock Excavation	$11 per CY
203.01 C	Shale Excavation	Shale Excavation	Common Excavation Price + $1.00 per CY
203.01 D	Muck Excavation	Muck Excavation	$9 per CY
203.05 H.3	Embankment	Overhaul	$1.40 per CY - Mile
260	Silt Fence	Mucking Silt Fence	$3.90 per LF
260	Silt Fence	Removal of Silt Fence [3]	$4.25 per LF
261	Fiber Rolls	Mucking of Fiber Rolls	$3.90 per LF
261	Fiber Rolls	Removal of Fiber Rolls [3]	$4.25 per LF
420.04 E	Bituminous Seal Coat	Blotter Sand	$27 per Ton [2]
430.04 G	Hot Mix Asphalt (Exc. Material Hauled to Disposal Area)	Bituminous Mixture	Machine Placed: Bid or Invoice Price + $31 per ton Hand Placed: Bid or Invoice Price + $48 per Ton
704	Temporary Traffic Control	Flagging	$32 per MHR

[1] Price paid for bituminous material will be invoice price plus freight costs.

[2] Price Includes haul up to 10 miles. Payment for haul exceeding 10 miles will be according to Section 109.03 E, “Force Account.” The haul distance for aggregate base and bituminous mix will be based on the average haul. The haul distance for blotter sand will be from the point where the haul begins to the point where it enters the project.

[3] This is only for pre-existing items that were not installed under the Contract.

Effective October 1, 2014

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX A OF THE TITLE VI ASSURANCES

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees as follows:

1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Recipient or the Federal Highway Administration as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

   a. withholding payments to the Contractor under the contract until the Contractor complies; and/or
   b. cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

Effective October 1, 2014

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX E OF THE TITLE VI ASSURANCES

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.,* 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.),* (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.),* as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.),* (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION (NDDOT)

2016 ON-THE-JOB TRAINING SPECIAL PROVISION

The bidder's signature on the proposal sheet indicates the bidder agrees to take part in the On-the-Job Training (OJT) Program and to follow this OJT Special Provision. Contractors that fail to follow this special provision will be subject to suspension of progress payments or sanctions up to and including revocation of bidding privileges.

I. POLICY STATEMENT

The purpose of the OJT Program is to provide training in the highway construction industry for minority, female, and economically disadvantaged individuals, hereafter known as the targeted group. Pursuant to 23 Code of Federal Regulations Part 230, Subpart A, Appendix B - Training Special Provisions, this program provides for on-the-job training aimed at developing full journeyworkers in the type of trade or job classification involved. Training and upgrading minorities and women in highway construction trades is the primary goal of the program.

The Contractor shall take all necessary and reasonable steps to ensure that minorities and women have the opportunity to compete for and participate as trainees or apprentices and to develop as journey-level workers in the type of trade or job classification employed. Contractors may use the NDDOT OJT preapproved training programs, apprentices in approved Bureau of Apprenticeship and Training (BAT) programs, or submit their own on-the job training curriculum for approval by NDDOT and Federal Highway Administration (FHWA).

II. ASSIGNED OJT POSITIONS

A. Contractors are assigned trainee positions based on federal highway dollars awarded by NDDOT to a contractor from October 1 to September 30. Trainee assignments are not project specific. The number of trainee positions assigned will be determined by formula outlined in the OJT Program Manual. https://www.dot.nd.gov/divisions/civilrights/docs/ojtprogram.pdf.

B. Contractors will receive the number of positions assigned and links to resources necessary for completion of program requirements via email.

C. The number of trainee positions assigned to each contractor will increase proportionately, as shown in the OJT Program Manual, for any applicable federally funded projects awarded to them.

Failure to follow this OJT Special Provision and the accompanying OJT Program Manual may result in suspension of progress payments or sanctions up to and including revocation of bidding privileges.

III. ONLINE RESOURCES

OJT Program Manual: Includes program requirements, wage rates, and curriculum: https://www.dot.nd.gov/divisions/civilrights/docs/ojtprogram.pdf

SFN 9762 Request for On-the-Job Training Program Approval: http://www.dot.nd.gov/forms/sfn09762.pdf

SFN 60226 Request for On-the-Job Trainee Approval: http://www.dot.nd.gov/forms/sfn60226.pdf

SFN 51023 Voucher for On-the-Job Training Program Hourly Reimbursement: http://www.dot.nd.gov/forms/sfn51023.pdf

Davis-Bacon and Related Acts (DBRA) Handbook: https://www.dot.nd.gov/manuals/civilrights/davisbacon.pdf

IV. APPROVALS REQUIRED

A. Requests for Approval of Training Programs and Trainee Candidates must be submitted to Civil Rights Division (CRD). Contractors must request and receive program and trainee candidate approval in order to pay trainees less than the established Davis-Bacon wage for the job classification concerned. No training

program hours will count toward the fulfillment of an assigned trainee position or be eligible for reimbursement without prior approval. No retroactive approval will be granted.

1. Submit *SFN 9762 Request for On-the-Job Training Program Approval* and the pre-approved training curriculum for each trainee position assigned by April 1 or within fifteen (15) calendar days of notification of any additional position assignments. http://www.dot.nd.gov/forms/sfn09762.pdf

2. Submit SFN 60226 *Request for On-the-Job Trainee Approval* and each trainee's employment application. http://www.dot.nd.gov/forms/sfn60226.pdf

3. Submit *SFN 7857 Application for Eligibility,* completed/approved by Job Service North Dakota (JSND) to qualify an economically disadvantaged individual for participation in the OJT Program.

B. Pre-approved curriculum: NDDOT's OJT Program Manual contains pre-approved training curriculum for a number of skilled trade positions. Contractors should select a training program(s) based on their company's employment/staffing needs.

C. Customized curriculum: To request a training curriculum not included in the pre-approved curriculum, submit a written request for approval by NDDOT and FHWA.

The request must include:

- A training curriculum, including the classification requested, minimum number of hours required, and type of training the individual will receive to achieve journeyworker status.
- A minimum wage scale.

If approved, each new classification must comply with the provisions specified in the OJT Program Manual. No hours worked prior to approval will be credited toward completion of the customized training program. Training programs for classifications not covered by the Davis-Bacon and Related Acts (DBRA) will be considered on a limited basis.

The contractor may commence its "customized" training as of the date of the written approval.

D. Union apprenticeship and on-the-job training programs registered with the Bureau of Apprenticeship and Training (BAT), U.S. Department of Labor, may be used for trainee positions assigned under the OJT Program, provided the trainees or apprentices are minority, female, or economically disadvantaged. Nonminority males not certified as economically disadvantaged may only be used when the contractor has requested and received approval, from the Department, for additional trainee positions. The apprenticeship indenture agreements serve as the trainee's job application and must be provided prior to any hours being credited toward OJT Program completion.

E. Power Equipment Operators:

The contractor may train an individual on a combination of equipment if each piece of equipment falls within the same groups of power equipment operators identified in the training curricula (groups 1-3 and groups 4-6). These power equipment operator groups are referenced to the federal DBRA wage rates contained in the contract proposal. As an example, a "utility operator" may receive training on a broom, a front-end loader less than 1½ cubic yards, or other piece of equipment that is used around a paver if each piece falls within either groups 1-3 or groups 4-6. When multiple wage rates apply, the trainee's wage will be based on the equipment being operated at the time or on the highest of the applicable wage rates.

Use of the classification "pickup machine operator (asphalt dump-person)" as a group 4 power equipment operator is considered standard industry practice. The classification is defined as: "Operates the controls on the pickup machine that runs in front of the paver, trips the levers on the dump trucks, and balances the loads for the paver. The pickup machine operates on similar principles as a shouldering machine."

V. NDDOT'S RESPONSIBILITIES

A. The NDDOT OJT supportive services (OJTSS) consultant will monitor excerpts from the weekly certified payrolls submitted with the monthly vouchers for reimbursement. This includes weekly payrolls from contractors working on state funded only projects. The OJTSS consultant will assess when the trainees have completed the specified number of hours and their wages are increased accordingly. The OJTSS consultant will also assure that applicable fringe benefits are paid either directly to the trainees or for the trainee into approved plans, funds, or programs.

B. The OJTSS consultant is charged with visiting trainees and monitoring their progress under the OJT Program. To facilitate the on-site visits, the OJTSS consultant will contact contractors for the location of the trainees weekly.

VI. CONTRACTOR'S RESPONSIBILITIES

A. Appoint a company employee to be available and respond to weekly contacts by the OJTSS consultant. OJTSS monitors the status of assigned trainee positions (e.g., program and trainee approvals, trainees' progress, etc.). The OJTSS consultant will contact the individual listed on the company's approved SFN 60226 Request for OJT Trainee Approval. The appointed must reply to communications from the Department and the OJTSS consultant in a timely manner.

B. Take steps to ensure trainees are aware they are formally enrolled in the OJT program.

C. Make trainees available to the OJTSS consultant for at least two on-site visits during the construction season.

D. Identify trainees on the payroll excerpts, for example: "grp. 4 roller operator trainee." This includes trainees in job classifications not covered by DBRA. Handwritten notes are appropriate for identification.

E. Assign each trainee to a particular person–either a supervisor or an employee proficient in the skills to be trained–who shall see that the trainee is given timely, instructional experience. This person must be familiar with the OJT Program, keep proper records, and ensure completion of the required training hours in accordance with the training curriculum.

F. Make the trainer and project superintendent available to the OJTSS consultant for at least two on-site visits each construction season.

G. May notify the Department to "propose graduation" or discontinue the training period of a trainee who has completed 90% or more of their hours and thereafter advance the trainee to journeyworker status.

H. Notify the Department when a trainee completes the number of hours required to graduate from the OJT Program. The Department will issue a certificate of completion and a wallet-sized card to the trainee.

I. May upgrade proficient trainees from one power equipment operator group or truck driver group to another, with the approval of CRD. Fewer hours are required to complete the upgraded position.

The minimum number of hours required will be:

Power Equipment Operator Groups 4-6 to Groups 1-3 = 400 hrs.
Class C Truck Driver to Class B = 200 hrs.
Class B Truck Driver to Class A = 200 hrs.

Depending on the variety of experience the trainee has gained under the previous curriculum, the difference in the hours may be deducted from the actual operation of the piece of equipment or truck. The contractor will need to review the trainee's past performance in order to make this determination.

J. Commercial driver's license (CDL) holders having over-the-road driving experience, with little or no highway construction experience, may be considered to have completed the Class C truck driver training curriculum and, therefore, are eligible to be upgraded to a Class B truck driver trainee, with the approval CRD.

K. May transfer trainees from one project to another in order to complete the OJT Program. If transfers are made, CRD must be notified and provided with the name of the trainer. The training hours will count toward overall OJT Program completion.

L. May use trainees on municipal, private, or other non-highway work and work performed out of state. The training hours will count toward overall OJT Program completion; however, no program reimbursement will be made for those hours. In addition, the hours will be limited to no more than 25% of the total hours required under the training curriculum.

M. Contractors may delegate or reassign trainee positions to subcontractors, with the acceptance of the subcontractors and the approval of CRD. The prime contractor must verify that the trainee will be able to accumulate enough hours to complete his or her training program. If approved, the subcontractor must obtain training program and trainee approval from CRD before the trainee begins work under the OJT program. Program reimbursement will be made directly to the prime contractor. The trainee position will remain the responsibility of the prime contractor.

N. May use trainees on projects subject to TERO requirements as part of the core crew or as part of the skilled labor supplied by the contractor.

O. Contractors may not use one trainee to fill multiple trainee positions. For instance, a subcontractor may not use the same trainee in the same training program to simultaneously fill two or more trainee positions reassigned to them by prime contractors.

P. May use a trainee on a piece of equipment in groups 1-3 or groups 4-6 for one assigned trainee position, then once that trainee has completed the program, the trainee may be trained on a different piece of equipment in groups 1-3 or groups 4-6 to fulfill a second assigned trainee position. When a trainee is used for a second time within a group, the contractor must pay that trainee at the higher wage rate as described in paragraph B under Wage Rates (page 8).

VII. CLASSROOM TRAINING

A. Classroom training may be used to train employees. Each classroom training curriculum must be pre-approved by CRD if the contractor wishes to count the classroom hours as training hours and be reimbursed.

Submit a proposed classroom training curriculum to CRD for approval. Define the type of training the individual will receive, classroom training curriculum, and the minimum number of hours required. The Department will determine the number of hours of credit each trainee will receive toward their training. No retroactive approval will be granted.

B. Contractors will be reimbursed for classroom training hours after the trainee has completed 80 hours of work on highway construction projects.

C. Reimbursement for classroom training will be limited to 60 hours per trainee per construction season. Qualified testing technicians and concrete testing technicians/inspectors will not be included in the 60-hour limit. Reimbursement for classroom training required under the NDDOT Transportation Technician Qualification Program will be at the NDDOT discretion.

D. The minimum wage scale to be used for classroom training will be that of the first federal-aid highway construction project on which the trainee will be employed. If the trainee is already employed on a federal-aid highway construction project, the trainee will be paid in accordance with the minimum wage scale applicable to that project. However, if the first project on which the trainee will be employed is a state funded only contract, the minimum wage scale to be used for the classroom training will be that of the appropriate DBRA wage in effect at the time of award of the state funded contract.

VIII. WAGE RATES

A. In no case shall the minimum wage be less than that of the Group 1 Laborer classification in the federal

DBRA wage rates contained in the contract proposal. A trainee working on a state funded only project, must be paid the DBRA wage rate in effect at the time of award for the type of work the trainee is performing.

B. The minimum wage rates shall not be less than 80% of the journeyworker rate for the first two quarters of training, 85% of the journeyworker rate for the third quarter, and 90% of the journeyworker rate for the fourth quarter.

- Under the power equipment operator training curricula only, once a trainee has completed a training curriculum in either groups 1-3 or groups 4-6, the contractor may enroll the trainee in another training curriculum on a different piece of equipment in either groups 1-3 or groups 4-6.
- The minimum wage rate under the trainee's second program shall not be less than 85% of the journeyworker rate for the first two quarters of training, 90% of the journeyworker rate for the third quarter, and 95% of the journeyworker rate for the fourth quarter.
- For the purpose of the OJT Program, a quarter is 25% of the hours the trainee works toward completion of their approved program. The first two quarters of a 550-hour training curriculum would end after 275 hours, the third quarter after 138 hours, and the fourth after 137 hours.

C. Trainees shall be paid full fringe benefit amounts, where applicable, in accordance to DBRA requirements.

D. At the completion of the OJT Program, the trainee shall receive the wages of a skilled journeyworker.

IX. RECRUITMENT AND SELECTION

A. Trainee Prerequisites:

Trainees must possess basic physical fitness for the work to be performed, dependability, willingness to learn, ability to follow instructions, and an aptitude to maintain a safe work environment.

B. Licenses:

Truck driver trainees must possess appropriate driver permits or licenses for the operation of Class A, B, and C trucks. When an instructional permit is used in lieu of a license, the trainee must be accompanied by an operator who:

1. Holds a license corresponding to the vehicle being operated;
2. Has had at least one year of driving experience; and
3. Is occupying the seat next to the driver.

C. Recruitment:

1. Place notices and posters setting forth the contractor's Equal Employment Opportunity (EEO) Policy and the availability of the OJT Program in areas readily accessible to employees, applicants for employment, and potential employees.
2. Employ members of the targeted group (minority, female, or economically disadvantaged individuals) for all trainee positions assigned in accordance with the OJT Program. Additional positions requested by the contractor may be filled by individuals outside of the targeted groups.
3. Conduct systematic and direct recruitment through public and private employee referral sources.
4. Screen present employees for upgrading to higher skilled crafts. A present employee may qualify as a trainee; however, no work hours will be reimbursed or counted toward program completion prior to training program and trainee approval by CRD.

D. Selection:

1. Hire and enroll OJT trainee candidates who qualify as an individual in the targeted group.
2. Select a training program(s) based on their company's employment/staffing needs.

3. Individuals in the targeted group having experience in the selected curriculum may be eligible to participate in the OJT Program providing they:
    - are not or have not been journeyworkers in the selected curriculum, and/or
    - have not been previously trained in the selected curriculum
4. Non-minority males who are economically disadvantaged must obtain written certification from Job Service North Dakota (JSND) to qualify for the OJT Program. Contractors wishing to hire and enroll economically disadvantaged candidates must provide JSND's certification along with SFN 60226 and the employment application when requesting trainee approval.
    - JSND is the only agency that may certify an individual as economically disadvantaged. If JSND refers the candidate to the contractor, written certification under this category will be provided to the contractor at the time of the interview.
    - Any person wishing to obtain this certification must apply to JSND and complete the Workforce Investment Act Program's Application for Eligibility (SFN 7857). A contractor recruiting a candidate who may qualify must contact the Workforce Investment Act Program Manager at JSND. JSND contacts are also online: http://www.dot.nd.gov/divisions/civilrights/docs/jobservice-workforce-invest-contacts.pdf

X. BASIS OF PAYMENT

A. Contractors will be paid $4.00 for each hour of training in accordance with the OJT Program Manual.

B. Reimbursement will be made directly to the contractor. Complete SFN 51023 Voucher for On-the-Job Training Program Hourly Reimbursement for each trainee. Attach excerpts from the weekly certified payrolls showing the trainee's hours, rate of pay, and how applicable fringe benefits were paid. Excerpts from weekly payrolls are also required for state funded only projects. Vouchers without excerpts from payrolls will not be paid until the excerpts are provided. If the excerpts from the payrolls are not provided within one week, the voucher will not be paid and the trainee's hours will not be credited toward completion. http://www.dot.nd.gov/forms/sfn51023.pdf

C. Submit completed vouchers to CRD for approval and processing by the fifteenth (15th) calendar day of every following month the trainee is employed under the OJT Program.

Regardless, all vouchers for trainee hours worked on state funded only projects from July 1 to June 30 must be received by CRD no later than July 15 in order to be reimbursed. All vouchers for trainee hours worked on federally funded projects from October 1 to September 30 must be received by CRD no later than October 15 in order to be reimbursed. This is due to state and federal end-of-the-year budget fiduciary requirements.

XI. FAILURE TO PROVIDE THE REQUIRED TRAINING OR HIRE THE TRAINEE AS A JOURNEYWORKER

A. No payment shall be made to a contractor for failure to provide the required training or failure to hire the trainee as a journeyworker when such failure is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this OJT Program Special Provision.

B. If payments have been made, the Department will deduct the amount paid from the contractor's progress payment.

C. A trainee should be hired to begin training as soon as feasible after start of work utilizing the skill involved and remain employed as long as training opportunities exist in the approved work classification or until the trainee has completed his or her training program.

D. It is not required that all trainees be employed for the entire length of the construction season. A contractor will have fulfilled its responsibilities under this OJT Special Provision if it has provided acceptable training to

the number of trainees assigned. The number trained shall be determined on the basis of the total number enrolled for a significant period.

XII. UNFILLED OR INCOMPLETE TRAINEE POSITIONS

A. Provide written explanation for unfilled or incomplete trainee assignments to CRD by October 1 of the current construction season. CRD will decide, on a case-by-case basis, whether to carry the assigned positions over to the next construction season.

B. Positions carried over from the previous construction season must be among the first positions filled at season startup. To notify CRD of the trainee's rehiring, submit *SFN 60226 Request for On-the-Job Trainee Approval*, marking 'Check if Carryover Trainee' in the Approved Training Program section of the form. There is no need for the training position or a returning trainee to be re-approved.

C. Sanctions, up to and including revocation of bidding privileges, may be imposed on the contractor for failure to provide sufficient explanation and documentation for reasons assigned trainee positions when unfilled or incomplete.

XIII. DEFINITIONS

Carryover Position: Incomplete trainee position carried forward from a prior program year.

Carryover Trainee: Trainee scheduled to continue required training hours under an approved training program from a prior program year.

CRD: NDDOT's Civil Rights Division administers the NDDOT On-the-Job Training Program.

Good Faith Efforts: A contractor's documented efforts to fulfill the OJT Program requirements, e.g., a new hires list, examples and locations of advertisements, list of current employees reviewed for skills upgrades, and any other means of demonstrating the contractor's efforts.

Journeyworker: A worker employed in a trade or craft who has attained a level of skill, abilities, and competencies recognized within the industry.

OJT Supportive Services (OJTSS): A consultant under contract with the Department to provide in-person oversight, support, and guidance to contractors and trainees to increase the effectiveness of approved training programs.

Trainee: A person who receives on-the-job training, whether through an apprenticeship program or other program approved or accepted by FHWA.

Trainer/Supervisor: Contractor's employee assigned to mentor, train, supervise, and support a OJT Program trainee.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

TEMPORARY EROSION AND SEDIMENT BEST MANAGEMENT PRACTICES

1. GENERAL

Install, maintain and remove appropriate Temporary Best Management Practices (BMPs).

Definitions:

A. Temporary Erosion and Sediment BMPs are to be installed and maintained before and during the term of the land disturbance activity. These items are removed when permanent erosion and sediment BMPs are installed.

B. Permanent Erosion and Sediment BMPs are to be installed and maintained once the project is completed so that the applicable permits can be terminated.

In some instances, individual temporary and permanent erosion and sediment BMPs for a site may consist of identical BMPs. In these cases, the temporary erosion and sediment BMPs may be used as the permanent erosion and sediment BMPs if they meet the following criteria:

1. The BMP was installed correctly,
2. Is in a functional condition,
3. Has had all accumulated sediment removed.

C. The Stormwater Pollution Prevention Plan (SWPPP) is the document that identifies potential sources of sediment or other pollution from construction activity and ensures practices are used to reduce the contribution of pollutants from construction site runoff.

D. Contractor Controlled Areas are areas not included in the contract, but are obtained and solely controlled by the Contractor (e.g., concrete or asphalt batch plants, concrete washout areas, equipment staging yards, material storage areas, excavated material disposal areas, Contractor furnished borrow areas, etc.).

E. Maintenance is any action taken to keep a BMP in working condition. These actions may consist of repairing failures of the BMP itself.

F. **Noncompliance** is any action or inaction that violates the regulations imposed by the applicable permits or the requirements of this special provision and other contract documents. Failure of a BMP does not necessarily constitute noncompliance as long as the BMP is repaired, replaced or supplemented within the timelines established in the applicable permits and no sediment is discharged from the site or into a water of the state.

2. CONSTRUCTION REQUIREMENTS

Develop a SWPPP specific to the project. The creation of the SWPPP is a cooperative effort between the NDDOT who creates the project plan sheets and the Contractor who creates a complete SWPPP which incorporates the plan sheets and the Contractor's means and methods. The project plan sheets by themselves do not meet the requirements of a complete SWPPP and should not be considered as such. The Contractor has the flexibility to modify the design and implementation of the temporary erosion and sediment controls to match the Contractor's means and methods and/or field conditions. These changes must be documented in the SWPPP and meet all regulatory requirements.

Obtain appropriate permit coverage for the activities conducted in Contractor Controlled Areas. A permit will be required for these areas regardless of their size. The NDDOT will have no responsibility for these areas.

Install perimeter erosion and sediment BMPs according to the plans/SWPPP prior to site disturbance.

Change the location of temporary erosion and sediment BMPs to fit the field conditions.

Update the SWPPP as work progresses, or as directed by the Engineer. Update the SWPPP to show changes due to revisions in work schedules or sequence of construction. Update the site map to reflect erosion and sediment BMPs that have been installed, changed, or removed.

Do not rely on perimeter BMPs as the sole method of controlling erosion. As the project progresses, install temporary erosion and sediment BMPs within the perimeter BMPs to control erosion resulting from the construction of the project.

Use temporary erosion and sediment BMPs to prevent contamination of adjacent streams or other watercourses, lakes, ponds or other areas of water impoundment.

Coordinate temporary erosion and sediment BMPs with the construction of permanent erosion and sediment BMPs to provide continuous erosion control. Do not install temporary erosion and sediment BMPs when permanent erosion and sediment BMPs are able to be installed. Once the permit is terminated or transferred to the Department, the maintenance of the permanent erosion and sediment BMPs becomes the responsibility of the NDDOT.

Install stabilization BMPs (mulch, seeding and mulch, etc.) in areas that have been disturbed where work has temporarily or permanently ceased following the timelines established in the applicable permits. If implementation of stabilization is precluded by snow cover, undertake such measures as soon as conditions allow.

Maintain the effectiveness of the temporary erosion and sediment BMPs as long as required to contain sediment runoff. Inspect the temporary erosion and sediment BMPs and complete the inspection and maintenance reports every 14 days and within 24 hours of a rainfall event of 0.25 inch or more. During prolonged rainfall (more than 1 day), conduct an inspection within 24 hours of the first day of the event and within 24 hours after the end of the event. Inspections are required only during normal business hours. Install a rain gauge to monitor rainfall amounts as required by the appropriate permit.

Correct any deficiencies in the BMPs within the timelines established in the applicable permits. If conditions do not permit access to the BMP, corrective actions can be taken by installing additional BMPs. Correct the original deficiencies as soon as conditions allow access to their location without causing additional damage to the slopes. In the inspection logs, document the conditions that prohibit access.

Provide copies of all inspections, documentation, record keeping, maintenance, remedial actions, and repairs required by the applicable permits to the Engineer. Provide inspection and maintenance reports within 3 working days after an inspection has been conducted.

Provide immediate written notification to the Engineer of proposed changes to the erosion control plan or SWPPP. The Engineer will review the proposed changes and determine if they are adequate. Documentation of maintenance and inspections that does not affect the erosion control plan or SWPPP does not require approval by the Engineer.

Remove the temporary devices when directed by the Engineer or when permanent erosion and sediment controls are installed.

3. Erosion and Sediment Control Supervisor.

A. General. Designate an erosion and sediment control supervisor. Provide the name and contact information for the supervisor at the preconstruction meeting. If this erosion and sediment control supervisor becomes unavailable on the project, designate a replacement supervisor. Notify the Engineer if this supervisor changes and provide the contact information for the new supervisor.

B. Qualifications. The supervisor shall be:

1. An employee of the Prime Contractor;

2. Familiar with installation, maintenance and removal of BMPs and the requirements of the erosion and sediment control plans, applicable permit requirements, specifications, plans and this provision; and

3. Competent to supervise personnel in erosion and sediment control operations.

C. Duties. The supervisor shall:

1. Provide erosion and sediment control as required by the SWPPP, Plans, and Specifications.

2. Be on the site to supervise the installation, operation, inspection, maintenance, and removal of the erosion and sediment BMPs.

3. Update the SWPPP as work progresses to show changes due to revisions in work schedules or sequence of construction, or as directed by the Engineer. Update the site map to reflect erosion and sediment BMPs that have been installed, changed, or removed.

4. Propose changes to improve erosion and sediment control.

5. Be accessible to the job site within 24-hours.

6. Provide the Engineer with documentation of all erosion and sediment control activities and inspections as required above.

3. PERFORMANCE

Correct all areas of noncompliance within 24 hours after notification of noncompliance. If corrective actions are not taken within 24 hours, the Engineer may:

1. Assess a contract price reduction of $500 per day per instance;

2. Have deficiencies corrected by another Contractor and deduct the cost of the work from the monies due or to become due to the Contractor;

3. Suspend all work; or

4. Withhold payment on other contract items/pay estimates.

These actions will be applied until deficiencies have been corrected.

4. BASIS OF PAYMENT

BMP installation will be paid for at the contract unit price for erosion and sediment control for the appropriate items and sections. The plans will detail the required BMPs for temporary and permanent installations. The same bid items may be used for temporary and permanent BMPs.

BMP items will be measured as specified in the “Method of Measurement” portion of the appropriate section of the specifications.

BMP item removal will be paid for at the contract unit price for “Remove _____”in the appropriate section of the specifications.

Include the costs for labor, materials, maintenance, equipment, disposal, adherence to the permit, and SWPPP modifications in the respective pay items.

When the Engineer directs the replacement of temporary erosion and sediment BMPs that are no longer functional because of deterioration or functional incapacity and those items were installed as specified in the Contract or as directed by the Engineer, the Department will pay for replacement BMPs

No payment will be made for replacing temporary erosion and sediment BMPs that the Engineer determines are ineffective because of improper installation, lack of maintenance, or the Contractor’s failure to pursue timely installation of permanent erosion and sediment BMPs as required in the Contract.

No payment will be made for replacing temporary erosion and sediment BMPs due to contractor operations. Include the cost to move Flotation Silt Curtain as work progresses in the price bid for “Flotation Silt Curtain”.

Erosion and sediment controls for Contractor Controlled Areas are the responsibility of the Contractor and will not be paid for by the Department.

Removal of sediment from silt fence and fiber rolls will be paid for at the price listed in the “Price Schedule PS-1.”

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FEDERAL MIGRATORY BIRD TREATY ACT

GENERAL

Work may impact migratory birds or active migratory bird nests. A nest is considered active when it contains eggs or chicks.

Nests are active primarily during the primary breeding season for migratory birds in North Dakota from February 1 to July 15.

All reasonable, prudent, and effective measures should be identified and implemented to avoid take. The definition of take in 50 CFR 10.12 is: to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.

PREVENTATIVE MEASURES

General

If no active nests are present at bridges, reinforced concrete box culverts, or structural plate pipes; prevent migratory birds from building new nests and from using nests built in previous years.

Preventative measures include securing tarps, fabric, netting, or wire mesh to the structure to prevent and discourage nesting. Additional measures may include hosing or knocking down any inactive nests or unfinished nests while avoiding take.

Preventative measures may be utilized before, during, and after breeding season.

Collect nests and nest debris and treat as agriculture waste. Disposal can occur by hauling waste to a permitted landfill or on-site when mixed with topsoil uniformly at the rate of 2 tons per acre away from water bodies and runoff.

If a nest where birds are present is found; the Contractor shall have a qualified biologist conduct a bird/nest survey no more than 5 working days prior to starting work at the structure site. A biologist is considered qualified if they have obtained a 4 year degree from an accredited university in a natural sciences field and is employed as an environmental professional.

If active nests are identified, cease construction or demolition and maintain a minimum buffer of 25 feet around active nests to avoid take. The qualified biologist may adjust the buffered distance in coordination with the USFWS. Maintain the buffer as construction resumes until the nests are no longer active.

SURVEY REQUIREMENTS

The USFWS requires that field surveys conducted for nesting birds with the intent of avoiding take include documentation of the presence of migratory birds, eggs, inactive and active nests, along with information regarding the qualifications of the biologists performing the survey, and any avoidance measures implemented at the project site.

If the survey or other available information indicates a potential for take of migratory birds, their eggs, or active nests, contact the USFWS for further coordination on the extent of the impact and the long-term implications of the intended use of the project on migratory bird populations.

Ecological Services
U.S. Fish & Wildlife Service
3425 Miriam Avenue
Bismarck, ND 58501
701-250-4481

BASIS OF PAYMENT
Include the costs for the removal and disposal of nests, the prevention of nesting, and bird/nest surveys in the price bid for the work at the structure site.

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

STRINGLESS GRADE CONTROL

PROJECT 7-058(013)000 – PCN 20416

DESCRIPTION

Replace Section 550.04 D.3.a “String Line” with the following.

CONSTRUCTION REQUIREMENTS

Use one of the following methods for grade control when slip form paving.

A. String Line.
Use and maintain a taut string line for operating the automatic equipment controls.

B. Stringless Grade Control.
Use Robotic Total Stations (RTS) for operating the automatic equipment controls.

The Supplemental Information will include the electronic data. The data may need to be converted into the required format for the RTS.

Submit a plan to the Engineer 14 days before beginning paving with the number of RTS being used and the coordinates with elevation of any addition survey points.

1. Engineer Responsibilities.
The Engineer will set the primary control points.

2. Contractor Responsibilities.
Set additional Survey points necessary for the operation.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

DOWEL BAR PLACEMENT

Project # 7-058(013)000 – PCN 20416

DESCRIPTION

The 2014 North Dakota Department of Standard Specifications and all Supplemental Specifications requires the use of dowel bar assemblies.

For this project, Dowel Bar Inserters (DBI) may be used instead of dowel bar assemblies.

If using dowel bar assemblies, place assemblies according to Section 550.04 E, “Placing Reinforcing Steel and Tie Bars” and according to Section 550.04 G.2, Transverse Contraction Joints”, except that the requirement to place dowel bar assemblies a minimum of 2,000 feet ahead of the paving operation is removed.

If using DBI, the requirements of the Section 550.04 G.2, “Transverse Contraction Joints” and Supplemental Specifications will govern the placement of the dowel bars, except that the requirement to place dowel bar assemblies a minimum of 2,000 feet ahead of the paving operation is removed.

EQUIPMENT

Provide a DBI that is self-contained and supported on the slip form paver with the ability to move separately from the paver and will not affect the forward movement of the finishing screed.

Use a DBI equipped with the following:

- Insertion forks capable of vibrating at a minimum frequency of 3000 vibrations per minute;
- Tamping bar;
- Finishing pan; and
- Any other devices required to finish the concrete for the full width of the pavement.

CONSTRUCTION REQUIREMENTS

One joint is defined as a transverse joint, bound by either two longitudinal joints or one longitudinal joint and one free edge.

A. Placement.

After the concrete has been consolidated and struck off, insert the dowel bars utilizing the DBI. Vibrate the dowel bars into the plastic concrete without deforming the slab or leaving voids around the dowel bar.

Finish the concrete after the dowel bars have been inserted.

Mark the location of each row of dowels on both sides for the pavement to allow for the sawing of the transverse joint.

B. Test Section.

Construct a test section that encompasses 20 transverse joints before starting full paving operations. Determine dowel bar location and alignment in the test section using a MIT Scan-2 as soon as the concrete has hardened sufficiently to not sustain damage from the test.

If one or more of the following occurs in the Test Section make adjustments in the paving operation and construct another test section:

- 1 or more joints receive a Joint Score of more than 15;
- 2 or more joints receive a Joint Score of more than 10;
- 4 or more joints receive a Joint Score of more than 5; or
- More than 10 dowel bars are above the any combination of the tolerances shown in Section "Placement Tolerance" of the Construction Requirements.

The Engineer will select 5 of the 20 joints and 2 locations at the end of Dowel Bars. Core the locations to determine the accuracy of the MIT Scan.

C. Placement Tolerances.

Place the dowel bars into the concrete pavement within the following tolerances:

1. **Longitudinal Translation (side shift):** Longitudinal translation is defined as the position of the center of the dowel bar in relation to the sawed joint. The maximum allowable longitudinal translation is 1.5 inches.

2. **Horizontal Translation:** Horizontal translation is defined as the difference in the actual dowel bar location from the theoretical positions as shown in the Standard Detail. The maximum allowable horizontal translation is 1.5 inches.

3. **Vertical Translation (Depth):** Vertical translation (depth) is the difference in the actual dowel bar location from its intended position. The maximum allowable vertical translation is 0.5 inch.

4. **Misalignment:** Dowel bar misalignment, either vertical tilt or horizontal skew is defined as the difference in position of the dowel bar ends with respect to each other. Vertical tilt is measured in the vertical plane and horizontal skew is measured in the horizontal plane. The maximum allowable misalignment is 3/8 inch over the length of the dowel bar.

D. Verification Testing.

Evaluate the placement of the dowel bars using Magnetic Tomography (MIT Scan-2). Calibrate the device according to the manufacturer's instructions for the type and size of dowel bars.

Perform all verification tests using a trained operator and in the presence of the Engineer. Provide a print out of the results to the Engineer.

Test all joints within 3 days of the placement of the concrete.

At the end of the day, provide the Engineer the results from the scan in Microsoft Office format.

Provide an electronic report of the scanned joints that includes the following information:

- Station of the Joint Scanned;
- Lane of the Joint Scanned; and
- For each dowel bar the following:
    - Horizontal location;
    - Depth;
    - Longitudinal translation;
    - Horizontal skew; and
    - Vertical tilt.

E. Joint Scoring.

The Engineer will use the test results from the Section D, “Verification Testing” of the Construction Requirements to determine a Joint Score.

The Joint Score is a measure of the combined effects from the dowel’s horizontal skew or vertical tilt.

The Joint Score is determined by summing the value of the misalignment shown in Table 1 and the number of bars in each misalignment category and adding one. The vertical tilt and horizontal skew should be evaluated and the greater misalignment will be used in determining the Joint Score.

The Joint Score criteria will be based on the Section C, “Placement Tolerances” of the Construction Requirements. Each transvers joint will receive a Joint Score.

Each dowel (d) will be scored individually using Table 1, “Weighting Factors Used to Determine Joint Score”.

Table 1
Weighting Factors Used to Determine Joint Score

Range of Misalignment, inches (mm)	Value
d ≤ 3/8 (9.5)	0
3/8 (9.5) < d ≤ 5/8 (16.0)	1
5/8 (16.0) < d ≤ 3/4 (19.0)	2
3/4 (19.0) < d ≤ 1.0 (25.0)	4
1.0 (25.0) < d ≤ 1.5 (38.0)	5
1.5 (38.0) < d	10

The Engineer will determine the Joint Score by summing the value of each dowel bar misalignment contained in the joint.

F. Acceptance.

1. **Joint Score of 5 or Less.**
   If the joint has a cumulative Joint Score of 5 or less the joint will be accepted.

2. **Joint Score More Than 5 Less Than or Equal to 10.**
   If a joint has a Joint Score of more than 5 and less than or equal to 10 and both adjacent joints have a score of 5 or less the joint will be accepted.

   If consecutive joints have Joint Scores more than 5 and less than or equal to 10, the joints will be accepted according to the Section B, “Contract Price Adjustment” of the Measurement and Basis of Payment.

3. **Joint Score More Than 10 Less Than or Equal to 15.**
   If an individual joint has a Joint Score greater than 10 and less than or equal to 15 the joint will be accepted according to Section B, “Contract Price Adjustment” of the Measurement and Basis of Payment

   If consecutive joints have a Joint Scores of more than 10, then the joints will be rejected. Remove and replace joints that have been rejected.

4. **Joint Score Greater Than 15.**
   Joints that have a Joint Score of greater than 15 will be rejected. Remove and replace joints that have been rejected.

G. Removal and Replacement of Rejected Joint.
Remove the affected pavement by making a full depth saw cut at the mid-point of the panel between the rejected joint and the nearest accepted joint.

Replace the removed panel according to Section 570.04, “Construction Requirements”.

Measurements for ride quality will not be taken until after the corrective action has been completed.

MEASUREMENT AND BASIS OF PAYMENT

A. General.
Include the cost for labor, equipment, verification testing, MIT Scan-2, and any other materials required to meet the requirements of this SP in the contract unit price of “8.5 In Non-reinforce Concrete Pvmt CL AE-Doweled”.

B. Contract Price Adjustment.
The Engineer will apply a contract price adjustment for accepted joints that have undesirable Joint Scores at a rate of $500 per joint that is accepted in this manner.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FLEXIBLE PAVEMENT SURFACE TOLERANCE

Project 7-058(013)000 – PCN 20416

DESCRIPTION

This provision details the surface tolerance requirements, corrective actions, performance incentives, and contract price adjustments for flexible pavement.

CONSTRUCTION REQUIREMENTS

A. Applicable Areas and Exceptions.

The pavement smoothness will be determined by profiling the finished surface of the mainline pavement. All finished bituminous surfaces will be profiled with the following exceptions:

1. Bridge decks and/or approach slabs and 150 feet on either side.
2. Side roads and approaches.
3. Shoulders, ramps and gore areas.
4. At-grade railroad crossings and 150 feet on either side.
5. Beginning and end of the project and 50 feet on either side of these boundaries.
6. 50 feet from areas that are not receiving surfacing.
7. Where safety and roadway geometrics do not allow the proper operating speed for the profiler to collect data. These areas will be determined by the Engineer.

On surfaces exempt from the profile testing, the Engineer will determine the pavement smoothness in accordance with Section 430.04 K, “Tolerances”.

B. Profiler.

The Engineer will furnish and operate the data collection equipment. The smoothness of the final roadway surface profile will be measured and analyzed using the International Roughness Index (IRI) to the nearest 0.1 inch. The Engineer will use a Class 1 profiler meeting ASTM E 950.

C. Operation.

The Engineer will use lasers to collect the profile in each wheel path of each lane.

The Engineer will trace the profile at approximately 31 and 97 inches, measured from the left edge of the lane, as determined by the direction of traffic. Provide traffic control for 500 feet beyond the ends of the project to facilitate the collection of profile data.

The data will be marked and labeled at the beginning and end of each trace, and event markers as identified by the Engineer.

Each trace will be labeled showing:

- Project;
- Location;
- Lane;
- Date tested; and
- Operator's name.

The Engineer will not test the roadway between November 30 and May 15. The Engineer will not test when the ambient temperature is below 32°F, or while it is raining or under inclement weather conditions. The Engineer will test when the pavement is dry and at an agreed upon time between the Engineer and the Contractor.

Prepare the surface for profile collection to ensure a clean surface for accurate testing. The Engineer will collect the profile at the agreed upon time, regardless of the condition of the final surface.

After the final lift of pavement is complete, schedule a time for the profile to be collected. The Engineer will collect the profile within 5 working days after notification. Data will be collected and the results submitted to the contractor a maximum of 5 working days after the testing date.

If the final lift of pavement cannot be completed before November 30, the Engineer will collect data for all portions of the roadway that have the final lift in place. Profile data for the unfinished portion of the roadway will be collected after May 15 of the following year.

D. Evaluation.

A lot is defined as a 528 foot road segment, one lane wide The Engineer will include a partial lot less than or equal to 370.0 feet in the previous lot. The Engineer will treat a lot greater than 370.0 feet as an independent lot. The MRI will be determined by averaging the IRI values from the right and left wheel paths to the nearest 0.1 inch.

The Engineer will evaluate the data and the data will remain the property of the Department. The MRI data will be used to determine performance incentives, contract price adjustments, and the need for corrective action.

E. Corrective Actions.

Areas that would result in a contract price adjustment may be ground to a lower lot MRI. If grinding occurs and results in an MRI of less than 50.0, the Engineer will not apply a performance incentive to that lot. Lots with an initial MRI of 42.0 or less will receive a performance incentive based on the initial readings, before grinding.

Submit a detailed corrective action plan. Corrective action can include a mill and overlay or diamond grinding. Perform corrective action in accordance with the relevant specifications. If the corrective action includes diamond grinding, apply a fog coat to the ground areas.

Do not perform corrective actions until the Engineer has approved the corrective action plan.

Grind lots to a maximum MRI of 70.0 in /mile.

The Engineer will collect a second profile a maximum of 5 working days after the completion of corrective action. If additional corrective action is necessary, the Engineer will apply a liquidated damage of $1,500 per trip for each profile collected after the second profile.

Perform corrective action on surface irregularities that exceed the requirements of Section 430.04 K, “Tolerances

F. Grinding.

Use equipment that does not cause strain or damage to the underlying surface of the pavement. Do not cause excessive ravels, aggregate fractures, or disturbance of the joints.

Perform grinding in the longitudinal direction so grinding begins and ends at lines normal to the pavement centerline. Do not overlap more than 2 inches between passes and ensure the depth variance between adjacent passes is less than 1/8 inch. Feather the grinding at the beginning and end of each pass.

Grind high shoulders to provide drainage and safety.

Grind the full width of the lane and daylight grinding on the shoulder by performing a feather pass.

Grind a minimum length of 30 feet. Join grind sections if the distance between grind sections is less than 60 feet.

When grinding in areas with speeds less than 45 MPH, areas with curb and gutter, and areas adjacent to waterways continuously collect all slurry or residue resulting from the grinding operation. Dispose of the slurry or residue as specified in Section 107.17, “Removed Material”.

BASIS OF PAYMENT

A. Liquidated Damages.

If the project would be considered substantially complete, as specified in Section 108.07 B, “Failure to Complete within the Contract Time” and corrective action is required, the Engineer may suspend time charges and the assessment of liquidated damages for up to 21 calendar days after the contract time has expired. If the corrective action is not complete within 21 calendar days after the contract time has expired, the Engineer will restart time charges and will assess liquidated damages.

B. Ride Quality.

The Engineer will pay a performance incentive for ride quality based on Table 1.

Table 1
Ride Quality Performance Incentives

MRI Range	Performance Incentive per Lot
≤ 32.0	$400
32.1 to 36.0	$300
36.1 to 39.0	$200
39.1 to 42.0	$100
42.1 to 50.0	$0

The Engineer will process contract price adjustments for ride quality based on Table 2.

Table 2
Ride Quality Contract Price Adjustments

MRI Range	Contract Price Adjustment per Lot
42.1 to 50.0	$0
50.1 to 57.0	($100)
57.1 to 64.0	($200)
64.1 to 70.0	($400)
70.1 ≥	Corrective Action

C. MISCELLANEOUS

Include costs necessary to prepare the roadway for testing in the contract unit price for asphalt pavement items.

Traffic control items, including flagging and pilot cars will be paid for according to Section 109.03, “Compensation for Contract Revisions”.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION (SP)

TEMPORARY WATER DIVERSION

Project # 7-058(013)000 – PCN 20416

DESCRIPTION

Diversions are used to temporarily reroute surface water or restrict flows to allow for the construction activities to take place.

This work consists of constructing and maintaining a temporary diversion to allow for the extension of a box culvert at Str # 58-002.762 and an extension of box culvert at Str # 58-009.046.

This work is in conjunction with the requirements of SP 03(14) "Temporary Erosion and Sediment Best Management Practices," and the Construction General Permits.

MATERIALS

Item	Section
Geosynthetic Type R1	858

Where R1 material is specified according to the design, alternative materials may be used if the alternative material has a lower permittivity and higher strength than Geosynthetic Type R1.

CONSTRUCTION REQUIREMENTS

A. General.

Obtain and modify all appropriate permits before work commences on the diversions.

Design, construct, operate, and remove temporary diversions to prevent soil/water interaction.

Strip and stockpile topsoil from areas where the temporary diversion will be constructed and installed. Do not place stockpiles between the diversion and the work area. Stabilize stockpiles placed within 200 feet of the diversion and work area within 24 hours of construction of the stockpile

Isolate work area using dikes or other methods even when no water is present. Construct the diversion before beginning work on the structure.

1. Plan Submittal.

Submit a plan for the diversion that includes work drawings and include the submittals with the Storm Water Pollution Prevention Plan (SWPPP).

2. Design.
Design the temporary diversion to withstand the 2 year event shown in Appendix A and meet the following:

- If flow occurs while the diversion is in place, a portion of the flow must be passed as water accumulates in order to maintain flows downstream;
- Maintain downstream water quality equal to the preconstruction upstream water quality; and
- Include provisions that will prevent the accumulation of job site sediment in the diversion.

B. Diversion Components.
Construction of the diversion may entail using the components listed below or other methods approved by the Engineer.

Install diversion measures before beginning work on the structure.

1. Dike.
Construct upstream and downstream dikes to isolate the work area. Construct dikes using one or more of the following materials:

- Sandbags;
- Sheet piles;
- Soil or rock wrapped with Geosynthetic Type R1;
- Water filled bladder;
- Impermeable containers; or
- Prefabricated dams.

2. Work Area Dewatering.
Operate the dewatering system within the work area to prevent any change in water quality of the water body. Before beginning dewatering of the work area, provide an inlet control system that limits sediment from entering the system and provide a stabilized discharge from the dewatering system.

Inlet control systems may include:

- Surface skimmers;
- Aggregate filled perforated containers; or
- Inlet filter sock.

Stabilized discharges may include:

- Dewatering basin;
- Sediment bag; or
- Filtering through vegetation.

Design and operate the discharge so that there is no visible sediment plume present in the water body and the discharge causes no additional erosion or sediment.

Do not discharge water directly to the water body or the diversion.

3. Culvert Installation.
Provide positive drainage from the upstream to downstream ends of the culvert and install energy dissipation measures at culvert outlets.

a. Culvert Through Existing Structure.
Install pipes through the existing structure.

Construction may include using the following steps:
(1) Install a temporary culvert through the structure.
(2) Anchor and seal the installed pipes at the upstream impervious dike.
(3) Extend the installed pipes through the downstream impervious dike.

b. Culvert Diversion.
Install a temporary pipe crossing under the roadway near the existing culvert.

4. Channels.
Construct channels with side slopes that are 2:1 or flatter with a channel bottom of sufficient width. Cover disturbed slopes and channel bottom with Geosynthetic Material, Type R1.

Overlap splices and joints placed at least 36 inches.

Secure the liner using methods that will ensure that the liner will not be disturbed by the design flows shown in Appendix A. Potential methods of securing the liner may include:
- Staples;
- Pins;
- Sandbags; or
- Riprap.

Patch damaged areas by overlapping the tear a minimum of 36 inches with geosynthetic and secure the perimeter of the patch area.

Install fiber rolls or silt fence along the top of the channel to prevent any sediment or debris from entering the channel.

Connect the downstream end of the channel before connecting the upstream end of the channel to the existing water body.

5. Diversion Pumping.
Place an inlet control system at pump inlets. An inlet control systems may include:
- Surface skimmers;
- Aggregate filled perforated containers; or
- Inlet filter sock.

Route the discharge hose through the structure or work area.

Design and operate the discharge so that no visible sediment plume is present in the water body and so the discharge causes no additional erosion of the water body.

C. Diversion Removal.
Do not begin removal of the temporary diversion until the construction activities relating to the structure are complete and all permanent erosion and sediment control devices are in place. Remove the diversion in a manner that prevents soil/water interaction.

Remove all materials used to construct the diversion.

Restore the area affected by the temporary diversion to the same condition that existed before construction.

1. **Downstream Dike.**
   Remove the downstream dike first. Stabilize the areas above the waterline where the downstream dike was located.

2. **Upstream Dike.**
   Remove the upstream dike to restore normal flow through the structure before removal of any devices used to create the diversion.

   Stabilize the areas above the waterline where the upstream dike was located.

   a. **Suspended Pipe.**
      Remove the suspended pipe at the same time as removing the upstream dike.

   b. **Channel and Pipe Diversion.**
      Remove the upstream dike and construct a dike to prevent water from entering the channel or pipe diversion.

3. **Pipe.**
   Remove pipe after the stream has been restored to normal flow.

4. **Channel.**
   Backfill temporary channels outside of the roadway embankment as specified in Section 203.04 E.3, “Compaction Control, Type B”. When backfilling roadway embankment areas, benching of slopes will be required as specified in Section 203.04 E.1, “General”.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Pay Item	**Pay Unit**
Temporary Stream Diversion	Each

The Engineer will pay for the stream diversion according to the Table 1.

Table 1	
Work Completed	**Percent of Contract Unit Price**
Stream Diversion Installed	75
Restoration of the Diversion	25

Include the cost for installation, maintenance, and removal of erosion control devices used in conjunction with the stream diversion in the contract unit price for “Temporary Stream Diversion”. Section 4, “Basis of Payment” in SP 03(14) does not apply to erosion control devices used in conjunction with stream diversions.

Such payment is full compensation for designing, furnishing all equipment, material, labor, and other incidentals to complete the work as specified.

Appendix A

MEMO

TO: File

FROM: Stephen Wirtz /s/
Bridge Division

DATE: December 3, 2015

SUBJECT: Project SOIB-7-058(013)000 - PCN 20416
Structures 58-002.762 and 58-009.046 2-Year Design Discharge

This document was originally issued and sealed by Stephen Wirtz, Registration number PE-10111 on 12/03/2015 and the original document is stored at the North Dakota Department of Transportation.

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the State of North Dakota. This document was originally issued and sealed by Stephen Wirtz, Registration number PE-10111 on 12/03/2015 and the original document is stored at the North Dakota Department of Transportation.

Hydraulic analyses for the proposed extensions of reinforced concrete box culverts on Highway 58 at reference points 2.762 and 9.046 were performed on July 1, 2014. The two-year discharge value is required to be published in the special provision for temporary stream diversions.

The two-year design discharge for structure 0058-002.762 was calculated using the Water-Resources Investigation Report 92-4020 and was determined to be 276 CFS. The channel for structure 0058-009.046 doesn't drain land, but is strictly for irrigation. Because the flow of the channel is determined by the capacity of 3 irrigation pumps, the two-year design discharge for structure 0058-009.046 can only be estimated based upon the capacity of the total output of the irrigation pumps, which is 201 CFS.

25/sw

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

WINTER SUSPENSION

Project: SOIB-7-058(013)000 - PCN 20416

DESCRIPTION

This project is scheduled to have a 2 year construction schedule. Winter suspension will be from 11/1/2016 to 4/15/2017 for non-irrigation related operations.

ROADWAY WORK

Complete the following roadway work from Station 330+00 to Station 489+50 (HMA Overlay Section) before winter suspension:

1. HMA Overlay;
2. Roadway Widening without impacts to the irrigation system;
3. Box Culvert Extension #58-002.762
4. Highway Pipe Extensions & Approach Culvert Replacements;
5. Permanent Signing;
6. Topsoil, Seeding, Mulching & Erosion Control;
7. Rumble Strips;
8. Permanent Pavement Marking.

Optional work from Station 4+60 to Station 330+00 may also include:

1. Roadway Widening without impacts to the irrigation system;
2. Highway Pipe Extensions & Approach Culvert Replacements;
3. Permanent Signing;
4. Topsoil, Seeding, Mulching & Permanent Erosion Control.

The full depth reclamation and concrete paving operations will not be permitted during the 2016 construction season.

IRRIGATION SYSTEM WORK

Complete the following irrigation work between October 1, 2016 and April 15, 2017. If irrigation work is not completed, Liquidated Damages of $5,000 per calendar day will be charged from 4/15/2017 until the work is complete and the irrigation system is fully functional. These operations are not subject to the requirements of the winter suspension.

1. All pipe identified as (Irrigation) in Section 60, Plan and Profile sheets;
2. Temporary pipe for grading (Station 157+96 to 168+82 Rt);
3. Box Culvert Extension #58-009.046
4. Irrigation Distribution Boxes and Concrete Flume End Sections.

WINTER SUSPENSION REQUIREMENTS

If the winter suspension requirements are not met, Liquidated Damages of $5,000 per calendar day will be charged from 11/1/2016 until 4/15/2017 or until the winter suspension requirements are met.

Meet the following conditions before beginning winter suspension:

A. The roadway surface is bituminous and is open to two way traffic (one lane in each direction);
B. Reset existing signs where replacement signs have not been installed. The cost of labor, materials and equipment necessary to reset and remove the existing signs before and after the winter suspension is included in the contract unit price for “Traffic Control Signing.” Reset all signs according to Standard Drawing D-754-23.
C. Maintain access on existing and proposed approaches;
D. Remove construction equipment, garbage and materials from the Right of Way; and

Once the winter suspension requirements have been met, notify the Engineer in writing to request winter suspension. The Engineer will respond to the request within 5 business days to coordinate inspection of the site to determine if the conditions for suspension have been met. The Engineer may require the completion of additional items of work relating to the suspension before issuing suspension.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

BIOLOGIST

PROJECT 7-058(013)000 – PCN 20416

DESCRIPTION

This work consists of hiring a qualified biologist to conduct field surveys within the habitat area for the following species:

- Interior Least Tern;
- Piping Plover; and
- Rufa Red Knot.

QUALIFICATIONS

A biologist is required to have a four year Bachelor of Science degree in wildlife management, biology/zoology, or closely related natural resources degree from an accredited university and to be trained in the identification of the interior least tern, piping plover, and rufa red knot and their habitat.

CONSTRUCTION REQUIREMENTS

The summer nesting season occurs between April 15 and August 31. A construction buffer extends 0.6 miles (1,000 meters) around the designated critical habitat along the Missouri River and oxbows located between Station 294+00 and 491+00.

A. Initial Survey.

Conduct an initial field survey within the buffer area 2 days before beginning construction activities to identify suitable habitat (e.g. sand bars or shoreline habitat).

B. No Habitat Present.

If no suitable habitat is identified during the initial survey, conduct a weekly survey to identify any new habitat uncovered by the river.

End surveys August 31 if no suitable nesting habitat, nesting pairs, or nests have been identified. Construction can resume without surveys on September 1.

C. Habitat Present.

If suitable habitat has been identified and construction activities will take place within 0.6 miles of the habitat, conduct 2 surveys daily:

- Conduct the first survey for 2 hours during daylight before starting construction activities for that day.
- Conduct a second survey for 1 hour beginning after work has stopped for that day. Stop construction activities early enough to allow for the survey to be completed no later than 30 minutes after sunset.

If nests, an individual, or pairs of birds are detected during surveys, notify the Engineer. The Engineer will contact USFWS, FHWA, and NDDOT ETS Division.

Do not resume construction activities within the avoidance area until one of the following has been fulfilled: daily surveys show that the birds have vacated the area, mitigation measures determined by the contacted agencies have been installed, or September 1 has been reached.

D. Survey Report.

Submit a report to the Engineer detailing the following information:

- Date and time of surveys;
- Locations of suitable habitat; and
- Results of the surveys.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Bid Item	Unit
Biologist	Lump Sum

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

PERMITS AND ENVIRONMENTAL CONSIDERATIONS

PROJECT NUMBER: SOIB-7-058(013)000 – PCN 20416

A Section 404 Permit from the US Army Corps of Engineers is needed for the impacts within jurisdictional wetlands. The NDDOT has applied for 404 Permit and will have it prior to the bid opening. This SP will be revised and will include the permit once it has been obtained.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

MATERIALS PIT LIST

GENERAL NOTES

NOTES: All pit data for the **February 5, 2016** bid opening has been carefully prepared, and is believed to be correct insofar as reliable preliminary pit information can reasonably be obtained. The contractors are advised to check all pit information before bidding.

It is recommended all bidders discuss pertinent pit data with the Materials and Research Engineer prior to the bid opening. Information such as field notes, field loggings, and comments may not be included in the materials pit list or boring logs. This additional information if present would be in the respective pit file at the Materials and Research Division.

Field logging by prospecting crews may list silt, clay, or silty clay. Our test hole plat will show silt-clay for those listings because the Department does not test to determine what percent is clay and what percent is silt.

Each pit shall be operated to prevent waste and to make the best use of the deposit and to produce a uniform gradation for the item of work under construction. Usually, the material will be removed to the full width and depth of the deposit. The purpose is to exhaust the portion of the pit being worked so the stripping or topsoil can be pushed into this exhausted area and smoothed, thereby eliminating the necessity of covering unused material in the pit unless the owner agrees otherwise.

In the use of pits, the contractor is required to comply with all federal, state, and local laws and regulations.

In the use of department-owned or optioned pits, the contractor shall fulfill all obligations imposed on the Department under the Department's options or agreements.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
MATERIALS PIT LIST

Material	Location	Approximate Quantity	Price and Ownership

STATE AID PROJECT SOIB-7-058(013)000 – WIDENING/HOT BIT PAVE/CONC OVERLAY/TURN LANES – ND 58 FROM JCT ND 200-TAIRVIEW-N TO JCT ND 1804 – MCKENZIE AND WILLIAMS COUNTIES

Aggregate	SE¼SW¼ 31-152-103 & NE¼NW¼ 6-151-103	88,800 ton unknown tons	State optioned until December 31, 2016 for $3.00 per cu. yd. or $2.00 per ton. James & Diana Gullikson, 3492 157th Ave NW, Cartwright, ND 58838. Tele: 1-701-744-5327

Percent Passing	**Areas SE¼SW¼ 31-152-103**					**Areas NE¼NW¼ 6-151-103**						
	A	**B**	**C**	**D**	**E**	**A**	**B**	**C**	**D**	**E**	**F**	
1" Screen	93	96	87	93	89	91	90	92	93	89	92	%
3/4" Screen	80	90	79	86	82	83	82	83	86	80	84	%
5/8" Screen	76	86	73	81	78	77	78	77	82	76	81	%
½" Screen	69	79	66	74	71	66	72	70	74	69	74	%
No. 4 Screen	50	64	48	55	54	43	53	51	53	51	55	%
No. 8 Screen	46	61	44	50	50	37	49	45	45	47	50	%
No. 10 Screen	45	60	43	49	49	36	49	44	45	46	49	%
No. 16 Screen	44	60	42	48	48	35	47	43	43	45	48	%
No. 30 Screen	42	59	41	45	47	33	45	40	41	43	46	%
No. 40 Screen	41	56	39	42	46	31	43	38	39	41	43	%
No. 50 Screen	37	50	36	35	42	26	38	32	33	35	36	%
No. 100 Screen	13	15	12	10	10	8	11	10	10	11	11	%
No. 200 Screen	5.5	5.4	4.5	3.5	3.4	3.4	4.6	3.8	3.9	4.2	4.1	%
Shale & Soft Rock*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	%
Shale & Soft Rock**	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	%
Shale & Soft Rock***	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	%
L.A. Abrasion Loss	17.1% Combined Sample Sec 31-152-103					16.3% Combined Sample Sec 6-151-103						

Wt. per c.f. loose	100.9	96.0	103.3	98.1	100.2	110.2	116.9	116.6	115.3	117.1	114.2	lbs
Wt. per c.f. rodded	113.1	107.6	116.7	111.4	112.6	121.6	121.2	122.4	122.1	123.9	121.5	lbs
P.I. (-40 Sieve)	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	

*Plus No.4 fraction - percent by weight of total sample
**Minus No. 4 fraction - Plus No. 30 fraction - percent by percent by weight of total sample
***In total sample

Size	Aggregate Type	Sieves	Water Absorption	Water Absorption
-5/8" +No. 4	natural rock	+No. 4	1.0%	1.1%
Minus No. 4	natural fines		2.6%	2.2%

NOTE: Material was selected at random throughout deposit and crushed with a crusher at Central Lab. The water absorption data is to be used for information purposes. Water absorption numbers may vary throughout the pit. The contractor shall be responsible for verifying the actual absorption prior to using the material in the project.

The west 230 feet of the Section 31 optioned pit area is reserved for the owner. Contact the landowner for details.

Telephone, power, and irrigation utility lines exist near this pit and must be located and avoided.

This source was also shown for projects SOIB-5-200(024)075 and it will have priority of use of the material. Previously awarded projects will have priority in use of material and contractors must contact companies that are awarded these projects for information on availability.

NDDOT Material Source Certificate of Approval is attached at the end of this job pit list.

Interested bidders are advised to investigate all the details concerning these deposits to their own satisfaction before considering them for bidding purposes.

Aggregate SE1/4 10-24-59 Montana 316,000 ton

State optioned until December 31, 2019 for 202.5¢ per cu.yd. or 135.0¢ per ton.
Prewitt Land & Livestock (Rod Prewitt), 924 12th Street SW, Sidney, MT 59270
Home Phone: (406) 480-2777

% Pass	A	B	C	D	E	F
1"	91	90	89	93	94	92
3/4"	82	81	83	83	89	84
5/8"	76	77	77	78	84	78
1/2"	67	70	69	71	77	70
No. 4	43	50	45	50	58	49
No. 8	37	44	40	43	54	44
No. 10	36	43	39	42	53	43
No. 16	34	41	37	40	51	41
No. 30	32	38	35	37	46	39
No. 40	31	35	34	34	39	38
No. 50	25	28	30	26	28	33
No. 100	8	9	13	7	8	12
No. 200	3.6	3.4	5.6	3.4	3.1	4.0
+No. 4*	0.0	0.1	0.1	0.0	0.1	0.0
-No. 4**	0.0	0.0	0.0	0.0	0.0	0.0
Total***	0.0	0.1	0.0	0.0	0.1	0.0
Wt/cf ls	115.2	111.3	116.3	114.5	111.1	114.8
Wt/cf rd	123.4	118.6	126.7	121.7	119.4	124.3
P.I.(-40)	NP	NP	NP	NP	NP	NP

L.A. Abrasion 16.3% Combined Sample

*Plus No. 4 fraction - percent by weight of total sample
**Minus No. 4 fraction - Plus No. 30 fraction - percent by percent by weight of total sample
***In total sample

Size	Aggregate Type	Sieves	Water Absorption
-5/8" +No. 4	natural rock	+ No. 4	1.3 %
Minus No. 4	natural fines	- No. 4	1.9 %

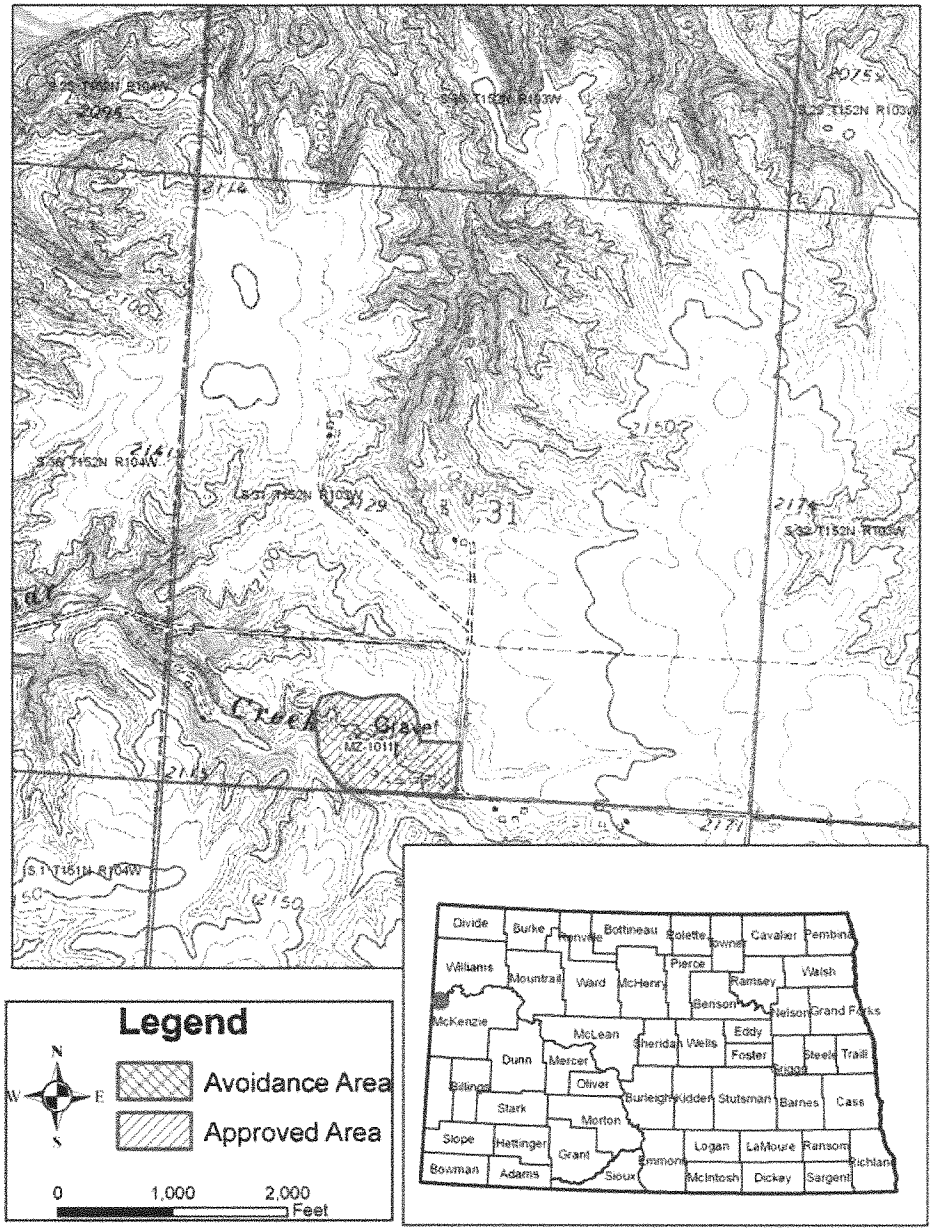
NOTE: The water absorption data is to be used for information purposes. Water absorption numbers may vary throughout the pit. The contractor shall be responsible for verifying the actual absorption prior to using the material in the project. Prior to the use of this location the contractor must acquire and comply with an Open Cut Mining Permit from the Montana Department of Environmental Quality (406-444-4970). Look at Material Source Certificate of Approval for other actions to follow. This deposit has a fair amount of oversize rock from 2” to 3” with not much over 3”. There is a lot more material outside the drilled area to the east and south.

This source was also shown for projects SOIB-5-200(024)075 and it will have priority of use of the material. Previously awarded projects will have priority in use of material and contractors must contact companies that are awarded these projects for information on availability.

NDDOT Material Source Certificate of Approval is attached at the end of this job pit list.

Interested bidders are advised to investigate all the details concerning these deposits to their own satisfaction before considering them for bidding

NDDOT Material Source Certificate of Approval



MZ-1011

Pit Name:

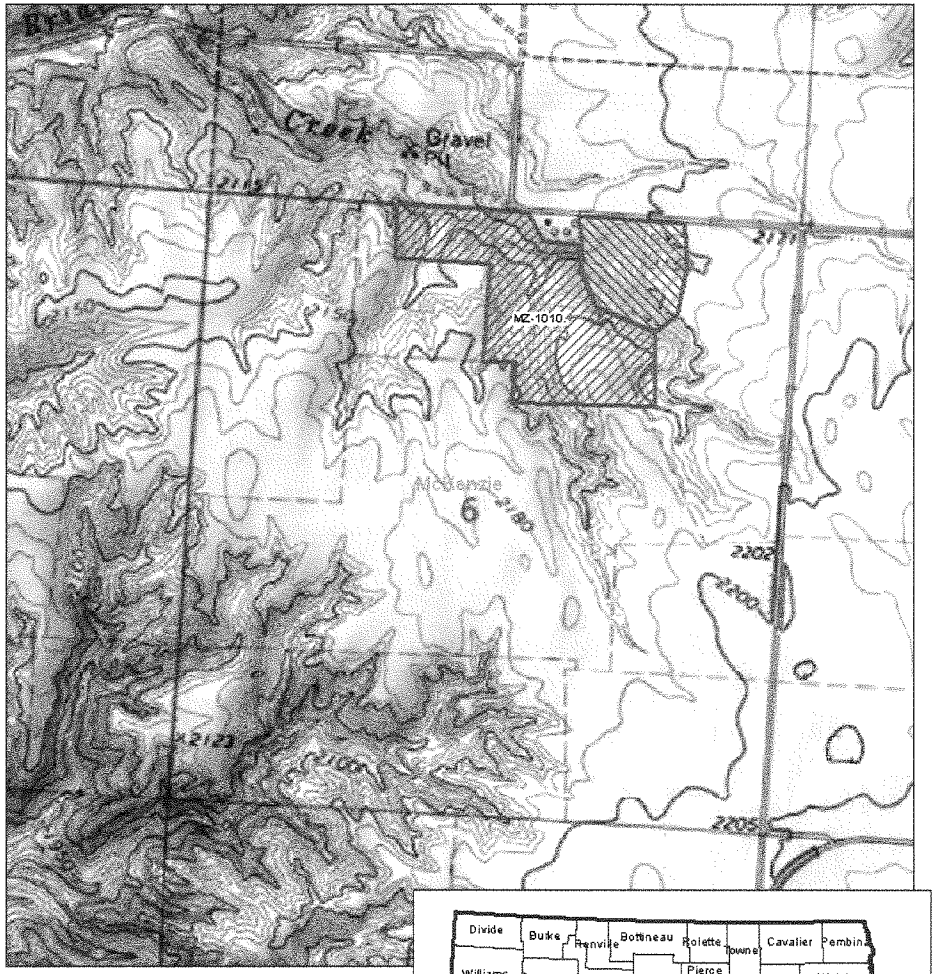
SE/SW	S. 31 T. 152 N, R 103 W
County:	McKenzie
Conditions:	

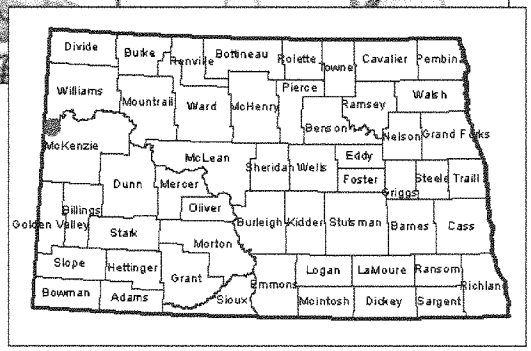
This location is approved for use, provided all avoidance areas shown on the map are avoided, and any Conditions listed above are complied with. NDDOT advises that all applicants (contractors or their representatives) may be subject to meeting certain legal responsibilities pursuant to one or more of the following authorities administered by the USFWS: Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.); Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.); and Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250). It is unclear at this time what effects, if any, material source activities may have on plants, fish, and/or wildlife species protected by the above-mentioned Acts. It is the responsibility of the applicants and/or any individual conducting activities at any approved site to fulfill the requirements of these Acts.

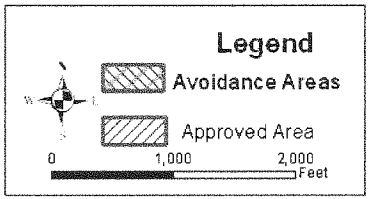
This approval does not imply landowner permission to acquire material at this location. An agreement with the landowner is still necessary. The contractor will be responsible for any impacts to wetlands, including permitting those impacts and mitigating the loss of the wetlands. As with all projects, if cultural artifacts and/or features (e.g., stone tools, fire hearths, stone circles, burials) are encountered, provisions outlined in Section 107.04 of the Standard Specifications for Road and Bridge Construction shall be followed.

If you have any questions regarding material sources please email materialsource@nd.gov

NDDOT Material Source Certificate of Approval







MZ-1010

Pit Name:

NE/NW S. 6 T. 151 N, R 103 W

County: McKenzie

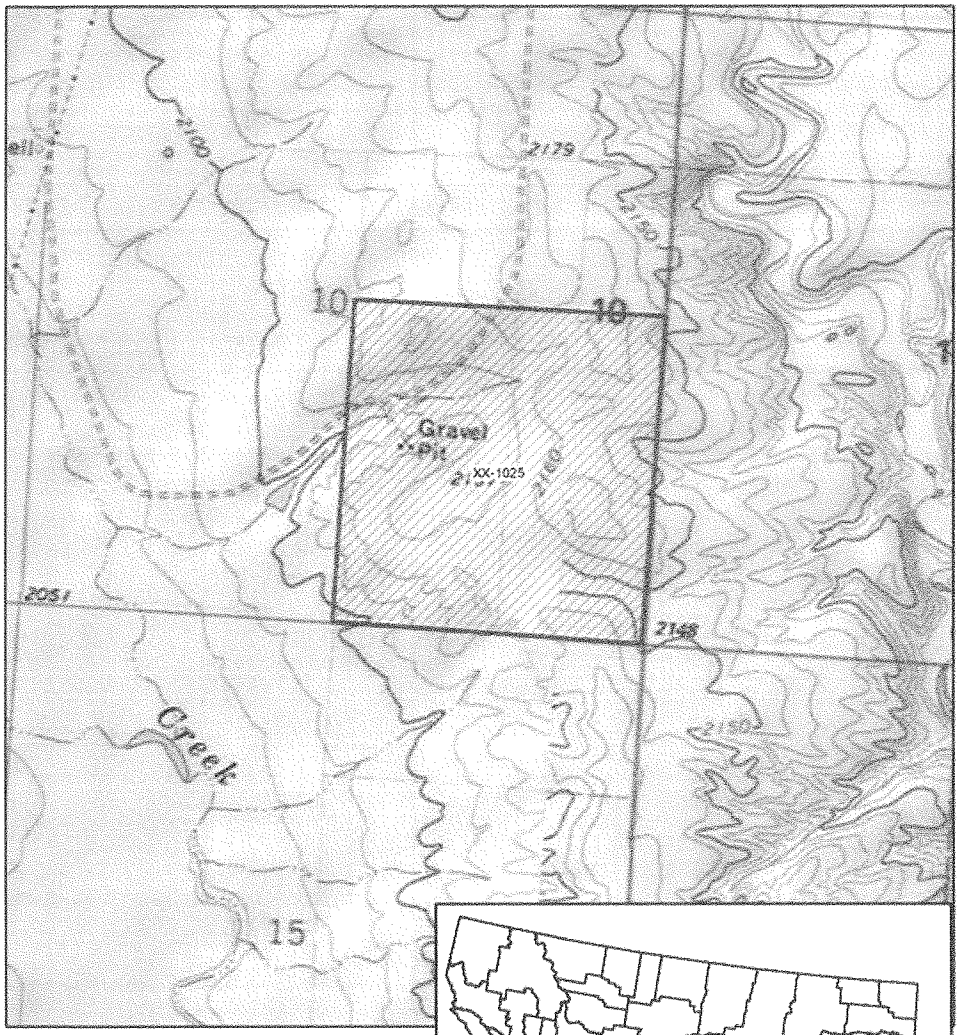
Conditions:

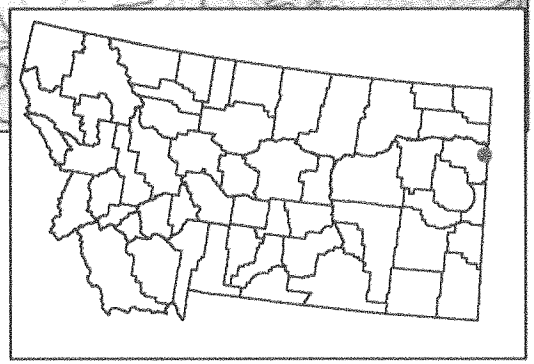
This location is approved for use, provided all avoidance areas shown on the map are avoided, and any Conditions listed above are complied with. NDDOT advises that all applicants (contractors or their representatives) may be subject to meeting certain legal responsibilities pursuant to one or more of the following authorities administered by the USFWS: Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.); Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.); and Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250). It is unclear at this time what effects, if any, material source activities may have on plants, fish, and/or wildlife species protected by the above-mentioned Acts. It is the responsibility of the applicants and/or any individual conducting activities at any approved site to fulfill the requirements of these Acts.

This approval does not imply landowner permission to acquire material at this location. An agreement with the landowner is still necessary. The contractor will be responsible for any impacts to wetlands, including permitting those impacts and mitigating the loss of the wetlands. As with all projects, if cultural artifacts and/or features (e.g., stone tools, fire hearths, stone circles, burials) are encountered, provisions outlined in Section 107.04 of the Standard Specifications for Road and Bridge Construction shall be followed.

If you have any questions regarding material sources please email materialsource@nd.gov

NDDOT Material Source Certificate of Approval





Legend

Avoidance Areas

Approved Area

0 1,000 2,000 Feet

XX-1025

Pit Name:
Prewitt

SE S. 10 T. 24 N, R 59 W

County: Montana - all

Conditions: Prior to the use of this location the contractor must acquire an Open Cut Mining Permit from the Montana Department of Environmental Quality (406-444-4970). Additionally, the source may be located on property encumbered by USFWS (United States Fish and Wildlife Service) property interest. The contractor must coordinate with Montana United States Fish and Wildlife Service Ecological Services (406-449-5225) in Helena, Montana and the landowner regarding any terms and conditions before using material from this source.

This location is approved for use, provided all avoidance areas shown on the map are avoided and all Conditions listed above and below are complied with.

NDDOT advises that all applicants (contractors or their representatives) may be subject to meeting certain legal responsibilities pursuant to one or more of the following authorities administered by the USFWS: Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.); Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.); and Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250). It is the responsibility of the applicants and/or any individual conducting activities at any approved site to fulfill the requirements of these Acts. The contractor will be responsible obtaining all applicable permits outlined in Section 107 of the Standard Specifications for Road and Bridge Construction (SSRBC). Additionally, contractor will be responsible for any impacts to wetlands, including permitting those impacts and mitigating the loss of the wetlands. As with all projects, if cultural artifacts and/or features (e.g., stone tools, fire hearths, stone circles, burials) are encountered, provisions outlined in Section 107.06 of SSRBC shall be followed.

This approval does not imply landowner permission to acquire material at this location. An agreement with the landowner is still necessary. If you have any questions regarding material sources please email materialsource@nd.gov

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION

FUEL COST ADJUSTMENT CLAUSE

Revision Date: 9/8/2006

Introduction

This Special Provision provides for price adjustments to the Contract when significant changes in the cost of motor fuels and burner fuels occur while completing the Contract work. Participation in fuel cost adjustment program is not mandatory. A Contractor is not required to notify the Department at the time of submitting bids whether the Contractor will or will not participate in the fuel cost adjustment provision.

The North Dakota Department of Transportation (NDDOT) will send the low responsible bidder a "Fuel Cost Adjustment Affidavit" (SFN 58393) with the proposed Contract. The Contractor shall return a completed Fuel Adjustment Affidavit with the signed Contract as specified in Standard Specification Section 103.06, Execution and Approval of the Contract. The affidavit shall be returned on all Contracts with this provision even if the Contractor elects not to participate in the provision.

Compensation adjustments for motor fuels and burner fuels consumed in prosecuting the Contract shall be determined by the Engineer in accordance with the provisions set forth herein. Compensation adjustments will be assessed monthly for the cost of the motor fuels and burner fuels whenever the Current Fuel Index (CFI) is outside the given threshold of the Base Fuel Index (BFI) for the Contract.

If the Contractor has a fixed price for fuel for motor or burner fuels to complete the work, no fuel cost adjustments will be made for that fuel type. If there is no fixed fuel price for motor or burner fuels, participation in the Fuel Adjustment provision is the decision of the prime Contractor.

If the prime Contractor decides not to participate, no fuel cost adjustments will be made to the Contract for the Contractor or any subcontractors. If the prime Contractor elects to participate in the fuel cost adjustment provision, the prime Contractor shall include the anticipated fuel cost of subcontractors who wish to participate. If fuel cost adjustments are made to the Contract, the prime Contractor shall ensure that participating subcontractors including second and lower tier, are included in the adjustments in proportion to the percentage of work and anticipated fuel cost by that subcontractor.

Fuel Indexes

Each month, NDDOT will record the average wholesale price for No. 2 diesel fuel and the average wholesale price for unleaded gasoline (87 octane). The monthly average will be the average of the daily rack prices for the month as reported by DTN Energy for Fargo ND.

The burner fuel index will be the No. 2 diesel fuel index regardless of the type of burner fuel actually used.

The Base Fuel Index (BFI) price for motor fuels and burner fuel to be used in the Contract will be the average wholesale price for the month prior to the bid opening.

The Current Fuel Index (CFI) price for motor fuels and burner fuel to be used for each monthly adjustment will be the average wholesale price for the month prior to the adjustment month.

Fuel Ratio

For motor fuels diesel and unleaded gas, the fuel ratio of the Contract will be determined by dividing the Contractor's affidavit costs for each motor fuel by the original Contract amount.

For burner fuels, the fuel ratio of the contract will be determined by dividing the Contractor's affidavit cost for burner fuels by the original Contract amount of plant-mixed hot bituminous pavement paid by the ton. Asphalt cement, binders and other miscellaneous bituminous items shall not be included.

The fuel ratio of the contract for motor and burner fuels will remain the same throughout the length of the contract. The sum of the affidavit fuel costs shall not exceed 15% of the original Contract amount.

The fuel ratio for the three fuel types will be determined by the following equation:

$$\textbf{Fuel Ratio}_{(x, y, z)} = \textbf{Affidavit Cost}_{(x, y, z)} / \textbf{Original Contract Amount}_{(x, y, z)}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
Fuel Ratio$_{(x, y, z)}$	=	Fuel ratio of the contract for each respective fuel type
Affidavit Cost$_{(x, y, z)}$	=	Fuel costs from Fuel Adjustment Affidavit (SFN 58393)
Original Contract Amount$_{(x, y)}$	=	Total of the original contract amount excluding lane rental, and Part B of the bid (when A+B bidding is used), if applicable.
Original Contract Amount$_{(z)}$	=	Total original contract amount for all hot bituminous pavement bid items combined, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation.

Cost Change

The monthly change in fuel costs will be determined by the following equation:

$$\textbf{Cost Change}_{(x, y, z)} = (\textbf{CFI}_{(x, y, z)} - \textbf{BFI}_{(x, y, z)}) / \textbf{BFI}_{(x, y, z)}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel (use diesel prices)
Cost Change$_{(x, y, z)}$	=	The relative change in the current CFI and the BFI for each fuel type
CFI$_{(x, y, z)}$	=	Current Fuel Index for each fuel type
BFI$_{(x, y, z)}$	=	Base Fuel Index for each fuel type

Contract Adjustments

Contract adjustments will be made for the cost of motor and burner fuels whenever the cost change exceeds a ±0.10 threshold. No fuel cost adjustment will be made for work done under liquidated damages. Adjustments will be determined for Motor Fuel (diesel), Motor Fuel (unleaded), and Burner Fuel (burner) separately and shall be computed on a monthly basis.

When the cost change is greater than 0.10, the rebate to the Contractor for each fuel type shall be computed according to the following formulas:

$$\mathbf{FCA_{(x,\,y,\,z)} = Fuel\ Ratio_{(x,\,y,\,z)} \times Estimate_{(x,\,y,\,z)} \times (\ Cost\ Change_{(x,\,y,\,z)} - 0.10\ )}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x,\,y,\,z)}$	=	Fuel Cost Adjustment for each of the fuel types
$Fuel\ Ratio_{(x,\,y,\,z)}$	=	Fuel Ratio for each of the fuel types
$Estimate_{(x,\,y)}$	=	The monthly total of work done on estimates issued in the current month excluding incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$Estimate_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$Cost\ Change_{(x,\,y,\,z)}$	=	The monthly change in fuel costs for each of the fuel types

When the cost change is less than -0.10, the credit to the Department for each fuel type shall be computed according to the following formulas:

$$\mathbf{FCA_{(x,\,y,\,z)} = Fuel\ Ratio_{(x,\,y,\,z)} \times Estimate_{(x,\,y,\,z)} \times (\ Cost\ Change_{(x,\,y,\,z)} + 0.10\ )}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x,\,y,\,z)}$	=	Fuel Cost Adjustment for each of the fuel types
$Fuel\ Ratio_{(x,\,y,\,z)}$	=	Fuel Ratio for each of the fuel types
$Estimate_{(x,\,y)}$	=	The monthly total of work done on estimates issued in the current month excluding any incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$Estimate_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$Cost\ Change_{(x,\,y,\,z)}$	=	The monthly change in fuel costs for each of the fuel types

Payments

Adjustments will be determined by the Engineer monthly. Adjustments will be made under the following spec and code for each fuel type:

109 0100	Motor Fuels (Diesel)
109 0200	Motor Fuels (Unleaded)
109 0300	Burner Fuel

When significant payment adjustments are made on final estimates to account for final in-place measured quantities, the Engineer may prorate the adjustments back to the months when the work was done.

Attachments

For informational purposes, a ‘Fuel Cost Adjustment Affidavit’ (SFN 58393) is included as Attachment A.

FUEL COST ADJUSTMENT AFFIDAVIT

North Dakota Department of Transportation, Construction Services
SFN 58393 (08-2006)

Attachment A

Project Number

The Contractor is not required to notify the Department at the time of submitting bids whether he will or will not participate in the fuel cost adjustment program. The Contractor shall return the affidavit on all Contracts with this Provision even if the Contractor elects not to participate.

Check the box for each fuel type that has a fixed price.
No adjustments in fuel price will be made for the boxes that are checked.

☐ Diesel ☐ Unleaded ☐ Burner Fuel

Does your company elect to participate in a fuel adjustment for this contract for the fuels that do not have a fixed price?
No adjustments in fuel prices will be made if **No** is checked.

☐ Yes ☐ No

If yes, provide the total dollars for each of the applicable fuels.

Diesel (x)	$		
Unleaded (y)	$		
Burner Fuel (z)	$		
Sum (x+y+z)	$	% of Original Contract Amount	%*

*The sum of the x, y, and z may not exceed 15% of the original contract amount.

Under the penalty of law for perjury of falsification, the undersigned,

_____, _____
Name Title

of _____, here by certifies that the documentation is submitted in good
Contractor

faith, that the information provided is accurate and complete to the best of their knowledge and belief, and that the monetary amount identified accurately reflects the cost for fuel, and that they are duly authorized to certify the above documentation on behalf of the company.

I hereby agree that the Department or its authorized representative shall have the right to examine and copy all Contractor records, documents, work sheets, bid sheets and other data pertinent to the justification of the fuel costs shown above.

_____ **X** _____
Date Signed

State of _____

County of _____

Subscribed and sworn to before me this _____ day of _____, _____.

(Seal) **X** _____
Signature of Notary Public

My Commission Expires _____