300 23rd Ave E, Suite 100
West Fargo, ND 58078
701 232 5353
KLJENG.COM

March 24, 2025

ADDENDUM 1

TO: All prospective bidders and suppliers on Project CP-4903(25) scheduled for the March 31st, 2025 bid opening.

Revisions for CP-4903(25):

Remove & replace plan sheet:

- Section 1 Sheet 1 Revised 03/24/2025
- Section 2 Sheet 1 Revised 03/24/2025
- Section 4 Sheet 1 Revised 03/24/2025
- Section 6 Sheets 1-2 Revised 03/24/2025
- Section 8 Sheet 1 Revised 03/24/2025
- Section 10 Sheet 2 Revised 03/24/2025

SECTION 1

SHEET 1:

- Revised to add Segment 4 which includes 315' of patching.

SECTION 2

SHEET 1:

- Revised Section 6 page(s) to include 1-2

SECTION 4

SHEET 1:

- Revised to add Segment 4 which includes 315' of patching.

SECTION 6

SHEET 1:

- Added Note 430-P05 to include patching for designated area on Traill County Highway 81.

SHEET 2:

- Added Sheet due to previous note addition.

SECTION 8

SHEET 1:

- Revised the following quantities

Spec	Code	Description	Unit	Previous Quantity	Addendum 1 Quantity
203	0138	COMMON EXCAVATION-SUBCUT	CY	1,064	1,227
302	0120	AGGREGATE BASE COURSE CL 5	TON	3,993	4,146
709	0151	GEOSYNTHETIC MATERIAL TYPE R1	SY	3,189	3,679

- Added the following quantities

Spec	Code	Description	Unit	Previous Quantity	Addendum 1 Quantity
430	2000	PATCHING	TON	0	172

SECTION 10

SHEET 2:

- Revised "COMMON EXCAVATION-SUBCUT" quantity for Segment 4 addition.
- Revised "AGGREGATE BASE COURSE CL 5" quantity for Segment 4 addition.
- Revised "GEOSYNTHETIC MATERIAL TYPE R1" quantity for Segment 4 addition.
- Added "PATCHING" quantity for Segment 4 addition.

Sincerely,

KLJ

Project Engineer

Enclosure(s): Revised Plan Sheets
-Project #: CP-4903(25)
c: Corwyn Martin, Traill County

SECTION 00300
BID FORM

PROJECT IDENTIFICATION

CP-4903(25)
MILLING, RAP-HOT MIX ASPHALT, & INCIDENTALS

ARTICLE 1 - BID RECIPIENT

1.01 This Bid is submitted to:

Traill County
114 W Caledonia Avenue
Hillsboro, ND 58045

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 30 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

Addendum No.	Addendum Date
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in SC-5.03 as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-5.06 as containing reliable "technical data."

E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.

F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.

I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

1. “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;

2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

Revised 03/24/25

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

5.02 **UNIT PRICE BID**

BASE BID					
Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1.	CONTRACT BOND	L SUM	1	$	$
2.	COMMON EXCAVATION-SUBCUT	CY	1,227	$	$
3.	WATER	M GAL	159	$	$
4.	SHOULDER PREPARATION	MILE	21	$	$
5.	AGGREGATE BASE COURSE CL 5	TON	4,146	$	$
6.	FOG SEAL	GAL	4,441	$	$
7.	MILLING PAVEMENT SURFACE	SY	84,419	$	$
8.	RAP – SUPERPAVE FAA 43	TON	30,606	$	$
9.	CORED SAMPLE	EA	315	$	$
10.	PATCHING	TON	172	$	$
11.	PG 58H-34 ASPHALT CEMENT	TON	1,689	$	$
12.	MOBILIZATION	L SUM	1	$	$
13.	FLAGGING	MHR	450	$	$
14.	TRAFFIC CONTROL SIGNS	UNIT	1,892	$	$
15.	PORTABLE RUMBLE STRIPS	EA	2	$	$
16.	TUBULAR MARKERS	EA	329	$	$
17.	PILOT CAR	HR	225	$	$
18.	BITUMINOUS LABORATORY	EA	1	$	$
19.	CONTRACTOR'S LABORATORY	EA	1	$	$
20.	GEOSYNTHETIC MATERIAL TYPE R1	SY	3,679	$	$
21.	RUMBLE STRIPS - INTERSECTION	SET	1	$	$
22.	SHORT TERM 4IN LINE-TYPE NR	LF	72,399	$	$
23.	PVMT MK PAINTED 4IN LINE	LF	136,505	$	$
Total of All Base Bid Prices					$

Unit Prices have been computed in accordance with Paragraph 13.03.B of the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

6.01 Bidder agrees that the Work will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before September 27th, 2025.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are submitted with and made a condition of this Bid:

A. Required Bid security in the form of 5% Bid Bond (in separate envelope);

B. Copy of contractor's license or certificate of renewal (in separate envelope);

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

Revised 03/24/25

ARTICLE 9 – BID SUBMITTAL

9.01 This Bid is submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____

By: _____
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____
Type (General Business, Professional, Service, Limited Liability):_____

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____
(CORPORATE SEAL)

Attest _____

Date of Qualification to do business in _*North Dakota*_ is ____/____/____.

A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of first joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____(SEAL)

By: _____
(Signature of second joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Bidder's Business Address _____

_____

Phone No. _____ Fax No. _____

E-mail _____ _____

SUBMITTED on _____, 20____.

State Contractor License No. _____.

DESIGN DATA ~ CP-4903(25)				
Traffic	Average Daily			
Current 2024	Pass: 325	Trucks: 20	Total: 345	
Forecast 2044	Pass: 365	Trucks: 25	Total: 390	
Clear Zone Distance: N/A		Design Speed: 55 MPH		
Minimum Sight Dist. for Stopping: 495'		Bridges: N/A		
Sight Dist. for No Passing Zone: 900'				
Pavement Design Life 20 (years)				

Revised 03/24/25	STATE	PROJECT NO.	PCN	SECTION NO.	SHEET NO.
	ND	CP-4903(25)	-	1	1

TRAILL COUNTY, NORTH DAKOTA

CP-4903(25)

TRAILL COUNTY HIGHWAY 16
MILLING, RAP-HOT MIX ASPHALT OVERLAY

Project is located on Traill County Highway 16 (CMC 4903), Segment 1 beginning North of Traill County Highway 9 (CMC 4924) and extending North approximately 6 miles. Segment 2 continues North approximately 1 mile to North Dakota Highway 200. Segment 3 beginning North of North Dakota Highway 200 and extending North approximately 4 miles North to Traill County Road 19 (CMC 4908). Segment 4 along Traill County Highway 81 for approximately 315 feet.

GOVERNING SPECIFICATIONS	Date Published and Adopted by the North Dakota Department of Transportation
Standard Specifications	7/1/2024
Supplemental Specifications	NONE

PROJECT NUMBER \ DESCRIPTION	NET MILES	GROSS MILES
Highway 16 (CMC 4903) - Segment 1	5.867	5.867
Highway 16 (CMC 4903) - Segment 2	0.989	0.989
Highway 16 (CMC 4903) - Segment 3	3.658	3.688
Highway 81 (CMC 4919) - Segment 4	0.060	0.060
CP-4903(25) Total	10.574	10.604

END PROJECT CP-4903(25) - SEGMENT 3:
Sta 204+70 = A Point Approximately 60 feet South of the Northeast Corner of Sec. 14, Twp. 147 N., Rge. 53 W.

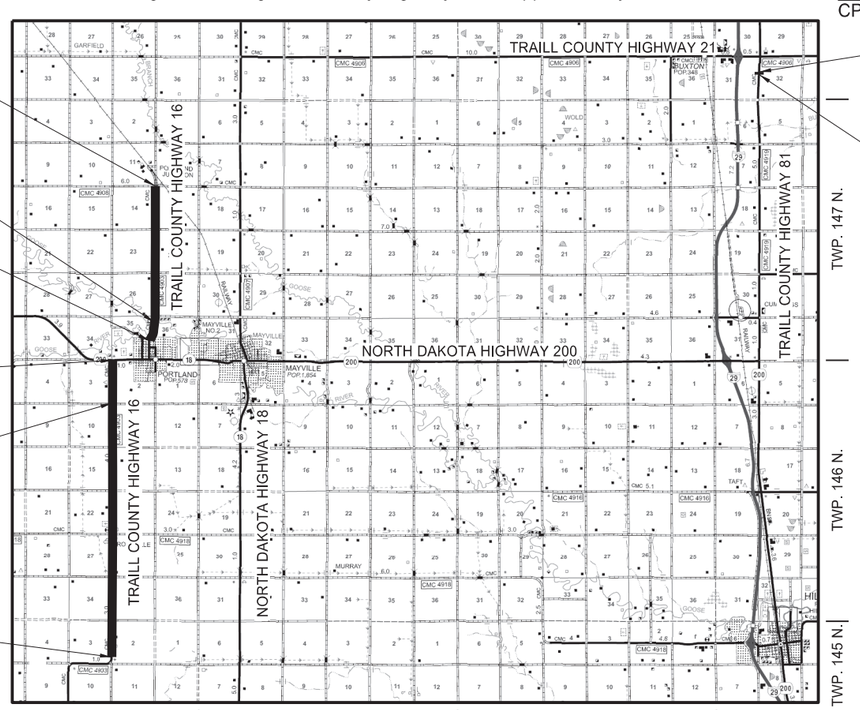
BRIDGE EXCEPTION:
Sta 36+94 to Sta 38+54

BEGIN PROJECT CP-4903(25) - SEGMENT 3:
Sta 10+00 = A Point Approximately 2,203 feet North and 769 feet West of the Northwest Corner of Sec. 1, Twp. 146 N., Rge. 53 W.

END PROJECT CP-4903(25) - SEGMENT 2:
Sta 1994+11 = A Point Approximately 80 feet South of the Northeast Corner of Sec. 3, Twp. 146 N., Rge. 53 W.

BEGIN PROJECT CP-4903(25) - SEGMENT 2:
END PROJECT CP-4903(25) - SEGMENT 1:
Sta 1941+88 = A Point Approximately on the corner of the Northeast Corner of Sec. 10, Twp. 146 N., Rge. 53 W.

BEGIN PROJECT CP-4903(25) - SEGMENT 1:
Sta 1632+13 = A Point Approximately 681 feet North of the Northwest Corner of Sec. 11, Twp. 145 N., Rge. 53 W.



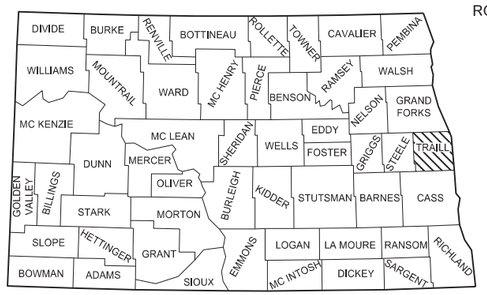
END PROJECT CP-4903(25) - SEGMENT 4:
Sta 98+81 = A Point Approximately 80 feet South of the Northeast Corner of Sec. 31, Twp. 148 N., Rge. 50 W.

BEGIN PROJECT CP-4903(25) - SEGMENT 4:
Sta 95+66 = A Point Approximately 400 feet Sorth of the Northeast Corner of Sec. 31, Twp. 148 N., Rge. 50 W.

N

PS&E Corrections Made: March 2025

Surveyed & Designed Date: January 2025 / March 2025



STATE COUNTY MAP

DESIGNER
Sean Kelly, PE
DESIGNER
Alex Glowacki, EI
DESIGNER
Austin Chmielewski, PE

REGISTERED PROFESSIONAL ENGINEER
SEAN P. KELLY
PE-28883
DATE 03/24/25
NORTH DAKOTA

KLJ
300 23RD AVE E
SUITE 100
WEST FARGO, ND 58078
(701) 232-5353, FAX (855) 288-8055

Revised 3/24/2025	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CP-4903(25)	2	1

TABLE OF CONTENTS

PLAN SECTIONS

LIST OF STANDARD DRAWINGS

Number	Description
D-101-1, 2, 3, 4	NDDOT Abbreviations
D-101-10	NDDOT Utility Company and Organization Abbreviations
D-101-20, 21	Line Styles
D-101-30, 31, 32, 33	Symbols
D-704-2	Traffic Control For Coring Of Hot Bituminous Pavement
D-704-7	Breakaway Systems For Construction Zone Signs - Perforated Tube
D-704-8	Breakaway Systems For Construction Zone Signs - U-Channel Post
D-704-9	Construction Sign Details - Terminal And Guide Signs
D-704-10	Construction Sign Details - Regulatory Signs
D-704-11, 11A	Construction Sign Details - Warning Signs
D-704-13	Barricade And Channelizing Device Details
D-704-14	Construction Sign Punching And Mounting Details
D-704-20	Terminal And Seal Coat Sign Layouts
D-704-22	Construction Truck And Temporary Detour Layouts
D-704-26	Miscellaneous Sign Layouts
D-704-27	Mobile Operation (Pavement Marking)
D-704-33	Two-Lane Roadway Portable Rumble Strips
D-704-50	Portable Sign Support Assembly
D-706-1	Bituminous Laboratory
D-760-5	Saw Slotted Rumble Strips At Intersections
D-762-4	Pavement Marking
D-762-11	Short-Term Pavement Marking

SPECIAL PROVISIONS

Number	Description
SSP 4	Longitudinal Joint Density

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END PROJECT CP-4903(25) - SEGMENT 3:
Sta 204+70 = A Point Approximately 60 feet South of the Northeast Corner of Sec. 14, Twp. 147 N., Rge. 53 W.

Sta. 203+65

Sta. 151+05

BRIDGE STRUCTURE:
Sta 36+94 to Sta 38+54

BEGIN PROJECT CP-4903(25) - SEGMENT 3:
Sta 10+00 = A Point Approximately 2,203 feet North and 769 feet West of the Northwest Corner of Sec. 1, Twp. 146 N., Rge. 53 W.

Sta. 98+23

Sta. 45+61

INTERSECTION RUMBLE SETS

Sta. 1994+76

END PROJECT CP-4903(25) - SEGMENT 2:
Sta 1994+11 = A Point Approximately 80 feet South of the Northeast Corner of Sec. 3, Twp. 146 N., Rge. 53 W.

Sta. 1941+88

BEGIN PROJECT CP-4903(25) - SEGMENT 2:
END PROJECT CP-4903(25) - SEGMENT 1:
Sta 1941+88 = A Point Approximately on the corner of the Northeast Corner of Sec. 10, Twp. 146 N., Rge. 53 W.

Sta. 1889+00

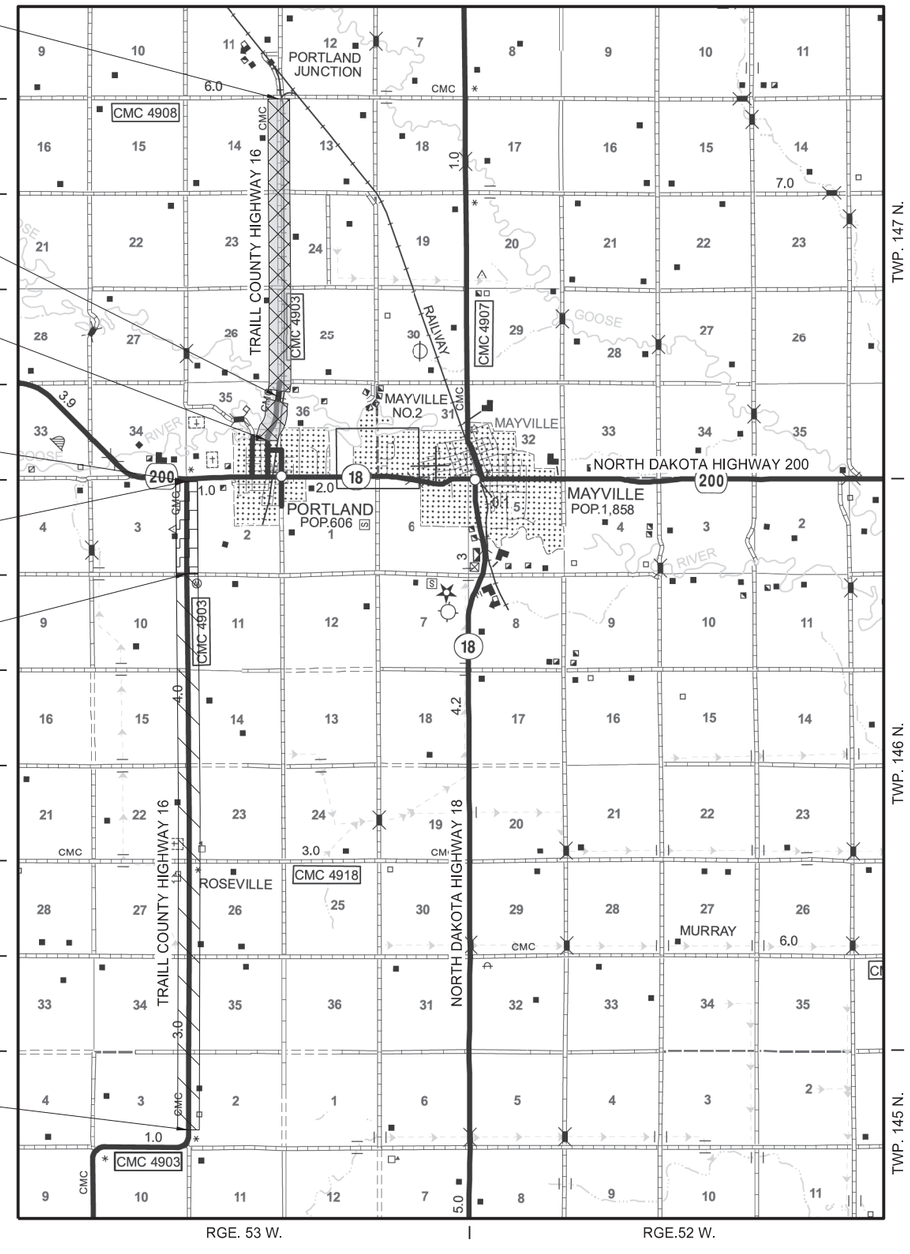
Sta. 1836+17

Sta. 1783+30

Sta. 1730+35

Sta. 1677+58

BEGIN PROJECT CP-4903(25) - SEGMENT 1:
Sta 1632+13 = A Point Approximately 681 feet North of the Northwest Corner of Sec. 11, Twp. 145 N., Rge. 53 W.



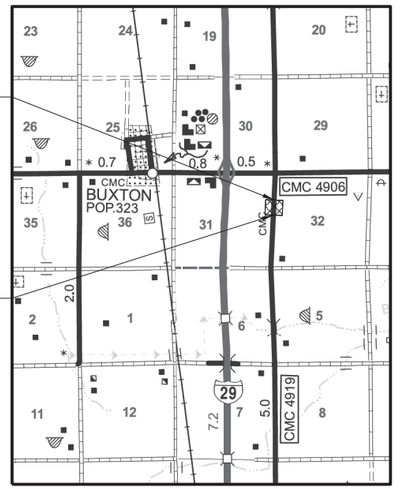
END PROJECT CP-4903(25) - SEGMENT 4:
Sta 98+81 = A Point Approximately 1,815 feet South of the Northeast Corner of Sec. 31, Twp. 148 N., Rge. 50 W.

Sta. 116+96

BEGIN PROJECT CP-4903(25) - SEGMENT 4:
Sta 95+66 = A Point Approximately 2,130 feet South of the Northeast Corner of Sec. 31, Twp. 148 N., Rge. 50 W.

Sta. 64+23

Sta. 10+00



SEGMENT 1
1.0" Milling, 3.5" RAP-Hot Mix Asphalt Overlay

SEGMENT 2
No Milling, 2.25" RAP-Hot Mix Asphalt Overlay

SEGMENT 3
No Milling, 3.0" RAP-Hot Mix Asphalt Overlay
& 0.5" Level Course

SEGMENT 4
Patching, Full Depth Subgrade Repair
(See Section 6)

N

REGISTERED PROFESSIONAL ENGINEER
SEAL
KELLY
PE-28883
DATE
03/24/25
NORTH DAKOTA

CP-4903(25)
TRAILL COUNTY, NORTH DAKOTA

KLJ

SCOPE OF WORK

DRWN. BY	CHK'D. BY	PROJECT NO.
ACG	SPK	2403-01869

Revised 03/24/25

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NOTES

230-P01 **SHOULDER PREPARATION:** Prior to paving, roll back existing material (earthen or aggregate) adjacent to the existing roadway asphalt shoulder. Material to be removed to a depth of approximately 2" below the milled surface, with the slope matching the milled roadway surface and daylight to the road inslope. Removed material will be stored on the existing roadway inslopes.

Place and compact milled material in this area, prior to paving.

Pull back the removed material from the inslope, shape and blend the material from the inslope, placing over the slough of the millings. Contractor will broadcast seed the disturbed areas with a seed mixture meeting NDDOT Standard Specifications 251.

Include all labor, material, and equipment required to perform this associated work in the bid item "SHOULDER PREPARATION".

302-P01 **AGGREGATE BASE COURSE CL 5:** The location and actual quantity of "AGGREGATE BASE COURSE CL 5" for approach graveling and shoulder graveling will be determined in the field by the Engineer.

411-P01 **MILLING PAVEMENT SURFACE:** Mill approximately the top 1.0" of existing roadway (see Milling Typical Section on Section 30, Sheet 1) for use as RAP in the asphalt mix. Mill depths at centerline may vary to aid in reshaping the crown to a uniform cross slope as directed by the Engineer. Mill the existing pavement in one pass per lane.

Find a suitable location to stockpile material and haul millings to the plant site for mixing. Include all work required to mill, haul, and stockpile the millings in the price bid for "MILLING PAVEMENT SURFACE".

Payment for milling will be by the square yard based on the top width of the respective existing typical section of Highway 16. Sloughs and widenings will not be measured for payment but will be incidental to the bid item "MILLING PAVEMENT SURFACE". If adjacent field drives, driveways, or section drives are paved, the Contractor will carry the milling through the approaches, as needed, to match mainline milling. This approach milling will be incidental to the bid item "MILLING PAVEMENT SURFACE" and will not be quantified for additional payment.

Taper the milling at the locations shown on Section 20, Sheet 1.

411-P02 **TEMPORARY ASPHALT WEDGES:** Place temporary asphalt or milled material wedges at the milled taper locations to allow for the smooth passage of vehicles. Include all costs for labor, materials, and equipment to install and remove the wedges in the unit price bid for "MILLING PAVEMENT SURFACE".

430-P01 **RAP-SUPERPAVE FAA 43:** Patch pavement surface areas showing signs of failure as per the Subgrade Repair Detail (see Section 20, Sheet 2), before the mainline milling operations. All areas requiring patching per the Subgrade Repair Detail (Patching) will be cleaned, tacked, and filled with hot mix asphalt and compacted in a separate operation. Compact the patching and leveling course with a minimum of one self-propelled pneumatic roller which meets NDDOT Standard Specification 151.01. Place all hot mix for the leveling course with a paver. Blade leveling will not be allowed.

Patching will be filled and compacted so the finished patch surface will match the existing pavement surface grade prior to milling. Milling additives are not required for patching.

All hot mix asphalt and asphalt cement required for the patching and leveling course will be measured and paid for by the ton of "RAP-SUPERPAVE FAA 43" and "PG 58S-28 ASPHALT CEMENT". This will be considered full payment for performing this work. The Engineer will mark all areas for patching, prior to patching work being performed. Provide the Engineer with 48 hours' notice prior to the start of patching operations.

Place the RAP-Superpave FAA 43 in lifts as shown in Section 30 of the plans. Exercise extreme care not to mark or tear the new driving surface and keep all loaded trucks off the newly placed hot mix asphalt. Repair any damage to the newly paved surface at the Contractor's expense.

430-P02 **RAP-SUPERPAVE FAA 43:** Add a maximum of 15 percent recycled asphalt pavement (RAP) in the RAP - Superpave FAA 43 mixture.

430-P03 **TACK COAT:** Supply a tack coat that meets the requirements of Section 401.03 C "Tack Coat". Apply the tack coat according to Section 401.04 "Construction Requirements". Undiluted application rates are shown in the basis of estimate. Tack coat will not be measured for payment and will be included in the unit price bid for "RAP - SUPERPAVE FAA 43".

430-P04 **FOG SEAL:** Place a fog seal on new pavement with an SS1H or CSS1H emulsified asphalt at a rate of 0.03 GAL/SY. Apply the fog seal immediately after the final rolling with a minimum mat temperature of 125°F. The fog coat may be eliminated at the discretion of the Engineer.

430-P05 **PATCHING**: For the designated patch area on Traill County Highway 81, remove the asphalt pavement full depth for an area of 50' long by 14' width (including the existing slough width). The Engineer will inspect the existing base course to determine if the entire designated patch area needs to be removed to full depth.

If the base course is determined stable, replace the existing asphalt in the 50' long patch to match the existing depth and then perform a 2.5IN mill and 2.5IN overlay for the remainder of the patch area to remove the rutting.

If the base course is determined unstable remove the entire designated patch area to full depth and place Geosynthetic Material Type R1, Aggregate Base Course Class 5, and Hot Mix Asphalt as shown in Section 20. Match adjacent existing asphalt and aggregate depths.

Include all costs for removals in the price bid for "COMMON EXCAVATION – SUBCUT". Include all costs for the hot mix asphalt, PG oil, and tack coat in the price bid for "PATCHING". Provide FAA 43 or better aggregate with PG 58S-28 or better oil for the patching material.

704-P01 **TRAFFIC CONTROL FOR MILLING & BITUMINOUS PAVEMENT:** Provide traffic control consisting of a temporary lane closure, flagging, and a pilot car.

Traffic control device quantities are based on a 7-mile limitation and the list below.

1. Standard D-704-15, layout A
2. Standard D-704-20, layout G
3. Standard D-704-22, layout K
4. Standard D-704-26, layouts EE and GG.

Place flaggers at the following intersections when traffic is affected due to construction activities.

1. Traill County Highway 11
2. North Dakota Highway 200
3. Traill County Highway 19

704-P02 **PORTABLE RUMBLE STRIPS (PRS):** Use PRS made of rubber or engineered polymers.
Install PRS as part of the temporary traffic control when the following signs are also part of the required traffic control set up:

- "Be Prepared to Stop" (W3-4); and
- "Flagger" symbol (W20-7)

Install PRS that meet the following criteria:

- Have no adhesives or fasteners required for placement;
- Have a manufacturer's speed rating that meets or exceeds the posted speed limit; and
- Each strip in the array must weight a minimum of 100 pounds.

Use individual PRS constructed in one of the following manners:

- A single piece;
- Interlocking segments: or
- Two pieces hinged at the midpoint.

An installed array of PRS consist of a minimum of 3 individual strips.

Move rumble strips with the flagging operation. Do not place rumble strips on horizontal curves.

The Engineer will count and measure each array as one unit. Include the cost of providing, installing, maintaining, and relocating PRS in the unit price bid for "PORTABLE RUMBLE STRIPS".

REGISTERED PROFESSIONAL ENGINEER
SEAL
KELLY
PE-28883
DATE 03/24/25
NORTH DAKOTA

Revised 03/24/25

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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NOTES

762-P01 **SHORT-TERM PAVEMENT MARKING:** The quantity for short-term striping is based on three applications for Segment 1 (Milling, Bottom Lift, Top Lift), one application for Segment 2 (Top Lift), and three applications for Segment 3 (Level Course, Bottom Lift, Top Lift). White edge lines are not required for short-term pavement marking.

762-P02 **EDGE LINE:** 4-inch white edge lines have been provided to be used throughout the project length. Continue edge lines through private drives and break for intersections.

762-050 **PAVEMENT MARKING:** If the Engineer and Contractor agree, plan quantity will be used as the measurement for payment for pavement marking items. Install all pavement markings at a 4-inch width.

Revised 3/24/2025	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CP-4903(25)	8	1

Estimated Quantities

SPEC	CODE	ITEM DESCRIPTION	UNIT	Highway 16	Highway 81					TOTAL
103	0100	CONTRACT BOND	L SUM	1						1
203	0138	COMMON EXCAVATION-SUBCUT	CY	1064	163					1227
216	0100	WATER	M GAL	159						159
230	0125	SHOULDER PREPARATION	MILE	21						21
302	0120	AGGREGATE BASE COURSE CL 5	TON	3993	153					4146
401	0070	FOG SEAL	GAL	4441						4441
411	0105	MILLING PAVEMENT SURFACE	SY	84419						84419
430	0143	RAP - SUPERPAVE FAA 43	TON	30606						30606
430	1000	CORED SAMPLE	EA	315						315
430	2000	PATCHING	TON		172					172
430	5803	PG 58S-28 ASPHALT CEMENT	TON	1689						1689
702	0100	MOBILIZATION	L SUM	1						1
704	0100	FLAGGING	MHR	450						450
704	1000	TRAFFIC CONTROL SIGNS	UNIT	1892						1892
704	1048	PORTABLE RUMBLE STRIPS	EA	2						2
704	1067	TUBULAR MARKERS	EA	329						329
704	1185	PILOT CAR	HR	225						225
706	0550	BITUMINOUS LABORATORY	EA	1						1
706	0600	CONTRACTOR'S LABORATORY	EA	1						1
709	0151	GEOSYNTHETIC MATERIAL TYPE R1	SY	3189	490					3679
760	0010	RUMBLE STRIPS - INTERSECTION	SET	1						1
762	0430	SHORT TERM 4IN LINE-TYPE NR	LF	72399						72399
762	1104	PVMT MK PAINTED 4IN LINE	LF	136505						136505

Revised 03/24/25	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	CP-4903(25)	10	2

SPEC	CODE	BID ITEM	QTY	UNIT
203	0138	COMMON EXCAVATION-SUBCUT	1,227	CY
302	0120	AGGREGATE BASE COURSE CL 5	1,486	TON
430	0143	RAP - SUPERPAVE FAA 43	709	TON
430	2000	PATCHING	172	TON
430	5803	PG 58S-28 ASPHALT CEMENT	40	TON
709	0151	GEOSYNTHETIC MATERIAL TYPE R1	3,679	SY
762	1104	PVMT MK PAINTED 4IN LINE		
		Segment 1 & 2	84,733	LF
		Segment 3	51,772	LF
			136,505	LF

762 1104 PVMT MK PAINTED 4IN LINE

SEGMENT	Begin Station	End Station	4IN White	4IN Yellow			4IN White
			Lt Edge Line	No Passing Barrier Line (Centerline Lt)	Centerline Skips (10' Line, 30' Skip)	No Passing Barrier Line Centerline Rt)	Rt Edge Line
			(LF)	(LF)	(LF)	(LF)	(LF)
1	1632+13	1638+30	617	617	150	-	617
	1638+30	1777+20	13,890	-	3,470	-	13,890
	1777+20	1783+30	610	-	150	610	610
	1783+30	1783+62	32	-	10	-	32
	1783+62	1789+40	578	578	140	-	578
	1789+40	1937+00	14,760	-	3,690	-	14,760
	1937+00	1941+50	450	-	110	450	450
	1941+50	1942+30	80	-	20	-	80
	1942+30	1947+50	520	520	130	-	520
	Segment 1 Subtotal =		**31,537**	**1,715**	**7,870**	**1,060**	**31,537**
2	1947+50	1988+79	4,129	-	1,030	-	4,129
	1988+79	1994+11	532	-	130	532	532
	Segment 2 Subtotal =		**4,661**	**0**	**1,160**	**532**	**4,661**
3	10+46	45+61	3,515	3,515	-	3,515	3,515
	45+61	55+25	964	964	240	-	964
	55+25	197+80	14,255	-	3,560	-	14,255
	197+80	203+25	545	545	-	545	545
	203+25	204+70	145	-	40	-	145
	Segment 3 Subtotal =		**19,424**	**5,024**	**3,840**	**4,060**	**19,424**
Grand Total =			**136,505**				

HIGHWAY 16 PATCHING

DESCRIPTION	QUANTITIY PER MILE	TOTAL	UNIT
Segment 1 & 2			
203 0138 Common Excavation-Subcut	75	515	CY
302 0120 Aggregate Base Course CL 5 (1.875 Tons/CY)	94	645	TON
401 0050 Tack Coat (0.05 Gal/SY)	11	76	GAL
430 0143 RAP - Superpave FAA 43 (2.0 Tons/CY)	50	343	TON
430 5803 PG 58S-28 (5.5% of HMA)	2.8	19	TON
709 0151 Geosynthetic Material Type R1	225	1,543	SY
Segment 3			
203 0138 Common Excavation-Subcut	150	549	CY
302 0120 Aggregate Base Course CL 5 (1.875 Tons/CY)	188	688	TON
401 0050 Tack Coat (0.05 Gal/SY)	22	81	GAL
430 0143 RAP - Superpave FAA 43 (2.0 Tons/CY)	100	366	TON
430 5803 PG 58S-28 (5.5% of HMA)	5.5	21	TON
709 0151 Geosynthetic Material Type R1	450	1,646	SY

HIGHWAY 81 PATCHING

DESCRIPTION	TOTAL *	UNIT
Segment 4		
203 0138 Common Excavation-Subcut	163	CY
302 0120 Aggregate Base Course CL 5 (1.875 Tons/CY)	153	TON
401 0050 Tack Coat (0.05 Gal/SY)	25	GAL
430 0143 RAP - Superpave FAA 43 (2.0 Tons/CY)	163	TON
430 2000 Patching	172	TON
430 5803 PG 58S-28 (5.5% of HMA)	9	TON
709 0151 Geosynthetic Material Type R1	490	SY

* See note 430-P05

REGISTERED PROFESSIONAL ENGINEER
SEAN P. KELLY
PE-28883
DATE 03/24/25
NORTH DAKOTA

CP-4903(25)
TRAILL COUNTY, NORTH DAKOTA

KLJ

BASIS OF ESTIMATE

DRWN. BY	CHK'D. BY	PROJECT NO.
ACG	SPK	2403-01869