

**CASS COUNTY HIGHWAY DEPARTMENT
BIDDERS PROPOSAL & PLANS
FOR
COUNTY PROJECT CH1307
CRACK CLEAN AND SEAL**

Various locations on Cass County Highways,
in Cass County, North Dakota

Date of Letting: 10:00 A.M., February 28, 2013

Proposal of: _____

COUNTY PROJECT CH1307

CRACK CLEAN AND SEAL

Various locations on Cass County Highways

in Cass County, North Dakota

I hereby certify that this plan, specification or 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.

_____/S/

Jason P. Benson
ND Reg. No. 7490

Date: _____ 1/31/13

GOVERNING SPECIFICATIONS:

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED BY THE NORTH DAKOTA DEPARTMENT OF TRANSPORTATION, OCTOBER 2008; SHALL APPLY, STANDARD DRAWINGS CURRENTLY IN EFFECT; AND OTHER CONTRACT PROVISIONS SUBMITTED HEREIN.

THIS DOCUMENT WAS ORIGNALLY ISSUED AND SEALED BY JASON P. BENSON, ND REG. NO. 7490 ON 01/31/13 AND THE ORIGINAL DOCUMENT IS STORED AT THE CASS COUNTY HIGHWAY DEPARTMENT, WEST FARGO, ND.

COUNTY PROJECT NUMBER CH1307

CRACK CLEAN AND SEAL

INSTRUCTIONS TO BIDDERS:

The Cass County Auditor at the Auditor's Office, 211 9th Street South, Fargo, North Dakota, will receive sealed bids until 10:00 A.M. on February 28, 2013. Bids will be opened immediately following the hour set for receiving bids in the Grasslands Room (Old Commission Room) at the Cass County Courthouse, 211 9th Street South, Fargo, North Dakota.

Plans and proposals may be obtained at the office of the Cass County Engineer at West Fargo, North Dakota, at \$10.00 per set, non-refundable.

All envelopes containing bids must be clearly marked on the outside "**BID FOR CRACK CLEAN AND SEAL**", and the North Dakota contractor's license number must be shown.

A bidder's bond in the amount of 5% of the amount bid, made payable to Cass County shall accompany each bid in a SEPARATE ENVELOPE ATTACHED TO THE OUTSIDE OF THE BID. Certified or Cashiers checks will not be accepted. **A copy of the current ND Contractor's License or certificate of renewal shall be included in the Bid Bond envelope.** No bid will be read or considered which does not comply with the bond or license requirements.

Prequalification is required for all bidders prior to obtaining a bidder's proposal. Contractors may be required to submit information detailing their ability to perform the work specific to this project. Cass County shall determine the Prequalification status of each contractor requesting a proposal, and reserves the right to deny bid documents to any contractor based on the County's responsibility determination.

The County reserves the right to reject any or all bids, and to waive any irregularities. All bidders must be qualified to bid under the laws of North Dakota in accordance with § 43-07-12 of the N.D.C.C.

COUNTY PROJECT NUMBER CH1307

CRACK CLEAN AND SEAL

INDEX OF PROVISIONS:

North Dakota Supplemental Specifications

Supplemental Specifications dated November 1, 2012 are not included in this proposal but are available at the county engineer's office, or be downloaded from the NDDOT's website at the following website:

<http://www.dot.nd.gov/dotnet/suplspecs/standardspecs.aspx>

Price Schedule for Miscellaneous Items Dated January 1, 2012

Special Provision 13-1 Contractor License & Contractor Claims

Special Provision 13-2 Crack Clean and Seal

Typical Sections

Summary of Quantities

Location Map

Sign Layout

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

PRICE SCHEDULE FOR MISCELLANEOUS ITEMS

January 1, 2012

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.

Payment for items of work under this schedule performed by a Subcontract shall include an additional allowance for the Prime Contractor as specified in Section 104.03 of the Standard Specifications.

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

SECTION NO.	SECTION NAME	ITEM NAME	PRICE PER ITEM
107.05 A.1	Maintaining Traffic	Flagging	\$25 per MHR
107.05 B.1	Haul Roads	Water	\$21 per M Gal.
107.05 B.7	Haul Roads	Bituminous Mix	\$28 per Ton**
107.05 B.7	Haul Roads	Bitumen for Mix	Invoice Price* + 10%
107.05 B.7	Haul Roads	Aggregate Base	\$13 per Ton**
203.01 B	Rock Excavation	Rock Excavation	\$8.40 per CY
203.01 C	Shale Excavation	Shale Excavation	Common Excavation Bid Price + \$0.70 per CY
203.01 D	Muck Excavation	Muck Excavation	\$7 per CY
203.02 F	Embankment Construction	Overhaul	\$1.12 per CY - Mile
407.07 B.2.a or 408.07 C.2.a	Hot Bit. Pavement (Excavated Material Hauled to Disposal Area)	Bituminous Mixture	Machine Placed: Bid or Invoice Price + \$20 per Ton Hand Placed: Bid or Invoice Price + \$37 per Ton
420.06	Bituminous Seal Coat	Blotter Sand	\$23 per Ton**
650.04 D.2 Step 3 650.05 D.2 Step 3	Repair & Overlay of PCC Bridge Decks	Low-Slump Concrete	\$335.55 per CY
708	Erosion Control	Mucking Silt Fence	\$3.00 per L.F.
708	Erosion Control	Mucking of Fiber Rolls	\$3.00 per L.F.
708	Erosion Control	Removal of Silt Fence	\$3.50 per L.F.
708	Erosion Control	Removal of Fiber Rolls	\$3.50 per L.F.

* Price paid for bituminous material will be Invoice Price plus Freight Costs.

** Price includes haul up to 10 miles. Payment for haul exceeding 10 miles will be according to Section 109.04 C of the Standard Specifications. 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.

CASS COUNTY HIGHWAY DEPARTMENT

SPECIAL PROVISION 13-1

January 1, 2013

SECTION 102.02 CONTRACTOR LICENSE:

Section 102.02 of the Standard Specifications for Road and Bridge Construction, 2008 edition is deleted. All bidders must possess a current North Dakota Contractors License in accordance with § 43-07-12 of the North Dakota Century Code.

SECTION 104.06 CONTRACTOR CLAIMS:

If the Contractor claims additional compensation for work or material not covered by the Contract, the Contractor is required to prosecute the claim in accordance with Standard Specifications for Road and Bridge Construction, 2008 edition, paragraph 104.06, et seq. The provisions of subparagraph 104.06 D are not applicable to this contract, nor are the provisions of North Dakota Century Code 24-02-06 et seq. as the North Dakota Department of Transportation is not a party to this contract.

References in the Standard Specifications for Road and Bridge Construction, 2008 edition, to the North Dakota Department of Transportation or Department must be construed as referring to the owner. Likewise, a reference by the same works to engineer or director must be construed as referring to the owner of the project.

CASS COUNTY HIGHWAY DEPARTMENT

SPECIAL PROVISION 13-2

January 1, 2013

CRACK CLEAN AND SEAL

DESCRIPTION OF WORK:

This work shall consist of routing and sealing transverse and longitudinal cracks in the asphalt concrete roadway surfaces indicated on the attached map with the specified sealant.

MATERIAL:

1. The sealant material shall be low modulus, elastic type meeting the requirements of ASTM D6690.
2. The material shall be consist of asphalt and modifiers blended to produce a product with the following typical physical properties when tested after proper reaction of the material in a hot oil jacketed kettle for a minimum of 6 hours.

Test	Limits
Cone Penetration at 77° F 150 gr., 5 Seconds	90-150
Flow, 140° F	3.0 mm max.
Cold Bond: -20° F., 200% Extension	3 Pass Cycles
Minimum Application Temperature	380° F
Maximum Heating Temperature	400° F

The Contract shall submit a material specification sheet from the manufacturer showing test results for the above properties. The product name/number, name of the manufacturer, and the name of the supplier of the material shall also be provided. **This information shall be included with the Contractors bid.**

3. The material shall contain no water or volatile solvents and shall cure immediately upon cooling to a sufficient viscosity to prevent tracking by traffic.

CONSTRUCTION REQUIREMENTS:

A. Routing

1. Routing equipment shall be mechanical, power driven and capable of cutting a reservoir to the required dimensions. Equipment designed to plow the cracks to dimensions will not be permitted. Each side wall of the finished reservoir shall be vertical within a tolerance of 1/16 inch.
2. Cracks which are less than 3/4 inch in width or depth will require routing to a width and depth of 3/4 to 7/8 inch.
3. Cracks which are 3/4 inch or greater in width and depth will not require routing, but shall be thoroughly cleaned of foreign material to a depth equal to the width of the crack.
4. The wall of the finished reservoir shall be vertical and the reservoir bottom shall be flat.
5. Routing will not be allowed when the roadway is wet.

B. Cleaning

1. Cleaning shall be accomplished with an air compressor producing a minimum of 125 CFM output and equipped with a maximum 3/4" nozzle.
2. Reservoirs and cracks shall be thoroughly cleaned of dust, dirt, and loose materials so that it is clean and dry at the time the blocking medium or sealant are applied.
3. If a routed reservoir or crack is left overnight, it shall be recleaned immediately before the blocking medium or sealant is applied.
4. As a second cleaning procedure, a **heatlance** will be used to clean out any remaining debris and/or moisture just prior to sealant placement.
5. All routed asphalt concrete and foreign material resulting from the reservoir preparation shall be removed from the roadway surface before an area is opened to traffic.

C. Sealing

1. Cracks 3/8" or larger existing below the routed and cleaned reservoir shall be filled with an inert compressible material to ensure a nominal sealant depth equal to the width of the reservoir. The Engineer shall approve the compressible material proposed for use. All costs for furnishing and placing the blocking medium shall be included in the contract unit price bid for "Crack Clean and Seal."
2. Sealant material shall be placed within 72 hours of routing.
3. There shall be no visible signs of moisture on the roadway surface or in the reservoir at the time the sealant is applied.
4. The sealant manufacturer's recommended handling, mixing and application temperature restrictions shall be strictly adhered to.
5. Sealant shall be applied with a pressure type applicator.
6. When applying the sealant, the reservoir shall be overfilled and squeegeed to provide a film of sealant on the roadway surface 1 to 3 inches on both sides of the reservoir. If however, settlement occurs within the reservoir, a second application shall be done to fill all cracks to road level.
7. The squeegee shall be "U" shaped device, which will produce a full, uniform and neat appearing reservoir and adjoining surface area. Other type devices will require prior approval by the engineer.
8. A blotting material such as toilet tissue or an all natural, biodegradable, non toxic liquid designed to prevent tracking and picking of freshly applied hot -melt crack and joint sealant such as Glensoil 20 Plus or an approved equal product will be used. This product will allow shadow vehicles and traffic immediate access to the repaired pavement.
9. The Contractor shall repair or refill, at his own expense, any part of a sealed reservoir damaged by traffic.

D. Seasonal and Temperature Limitations

1. Routing and sealing of asphalt concrete surfaces shall be permitted only during daylight hours. See sheet 4 of 5 of the Proposal for completion dates.
2. Routing with a star bit type router will not be allowed when the air temperature is below 55° F.
3. Application of the sealant material not be allowed when the air temperature is below 45° F.

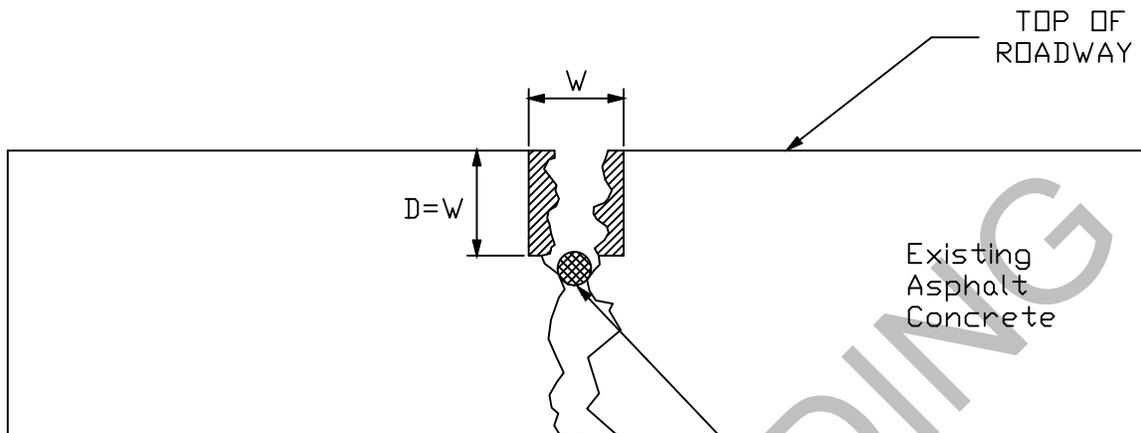
E. Traffic Control

1. Only one-half of the roadway shall be worked on at a time.
2. Routing and crack sealing shall be considered one work zone. A work zone shall not exceed two miles in length at any one time.
3. During weekends, nighttime and other non-working hours all temporary traffic control devices, materials, and equipment shall be removed to a minimum distance of 30 feet from the driving lane.
4. Traffic shall be maintained on the driving lanes through the work area by use of **flaggers on each end of the of the work zone at all times**. A pilot car will be required if traffic volumes and speeds through the work zone cannot be controlled by the use of flaggers. Use of the shoulder, as a driving lane shall not be permitted. The Contractor's traffic shall be in the same direction as public traffic. Routing and sealing of joints shall be considered a moving operation and shall be daylight operations.
5. Traffic approaching the project from intersecting roadways, streets, and approaches must be adequately accommodated. At major intersections or large commercial entrances, this may require additional signing, flaggers and channelizing devices on a temporary basis until work activities pass these areas.
6. Traffic control shall comply with construction sign layout Type A on Standard Drawing D-704-15. Standard Drawings D-704-9, 10,11,12,13, and 14 are also applicable.
7. Indiscriminate driving and parking of vehicles on the slopes and in the ditches will not be permitted. The Contractor at its expense shall restore damage as a result of such use.
8. All costs associated with traffic control shall be included in the unit price bid for "Crack Clean and Seal", and shall not be measured for separate payment.

BASIS OF PAYMENT:

Payment shall be made at the Contract Unit Prices per pound of material used, and shall be full compensation for labor, equipment, materials, traffic control, required insurance and bonds necessary to complete the work as specified. No adjustment to the contract unit price for "Crack Clean and Seal" shall be made regardless of changes in the contract quantity.

TYPICAL RESERVOIR SECTION

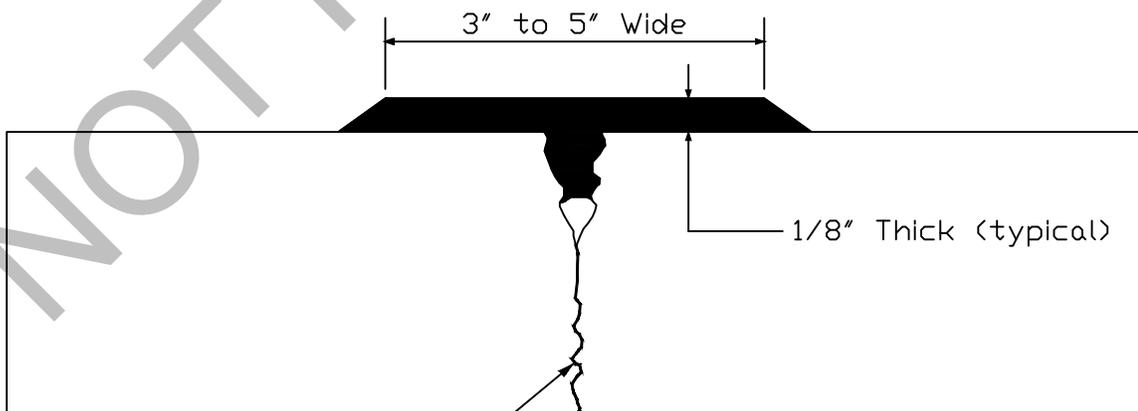


* EXISTING CRACK

COMPRESSIBLE MATERIAL

* Inert compressible material required for cracks 3/8" or more in width

W = 3/4" minimum



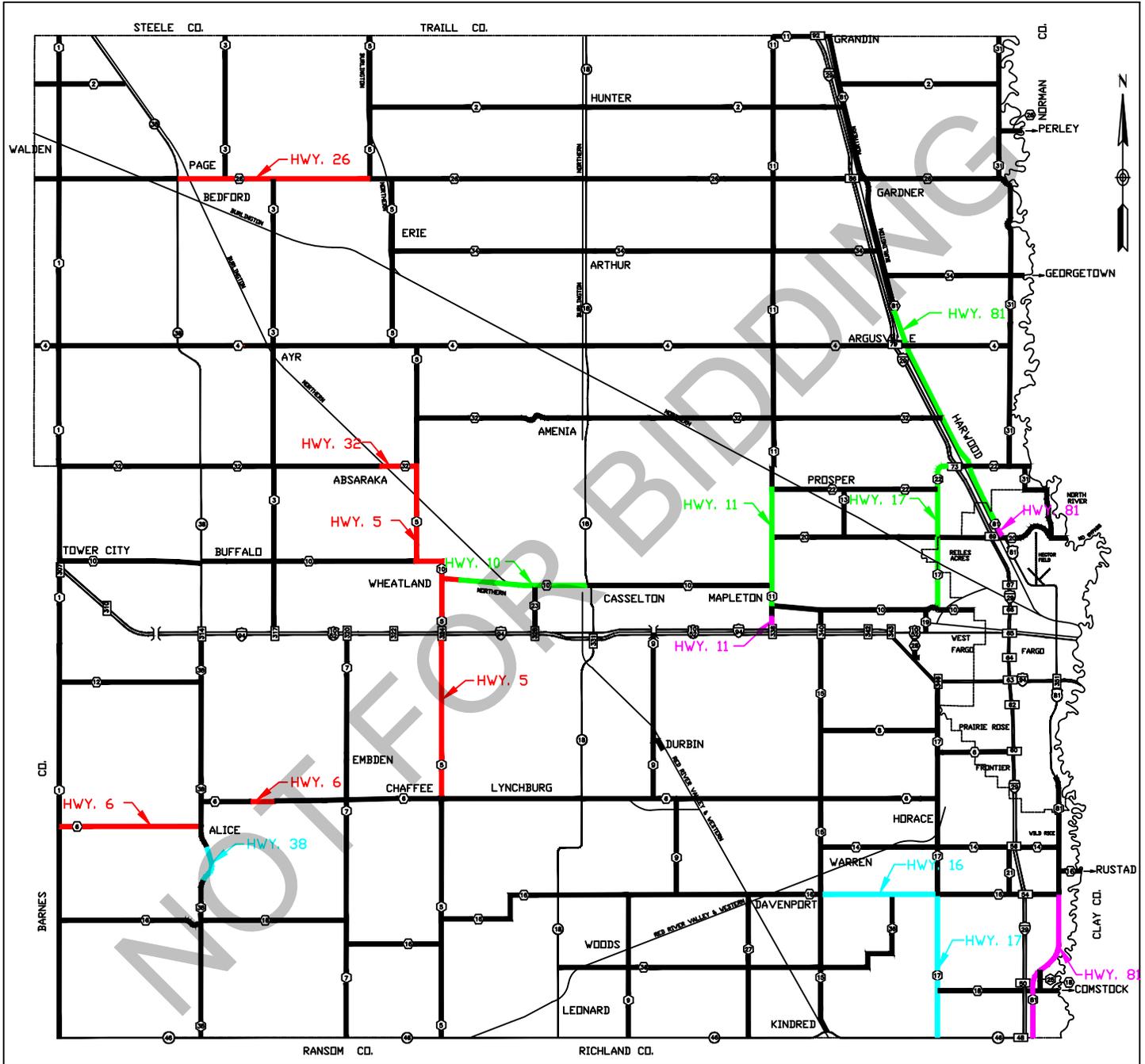
* EXISTING CRACK

NO BANDING OR ROUTING ON CONCRETE PAVEMENT

Summary of Quantities

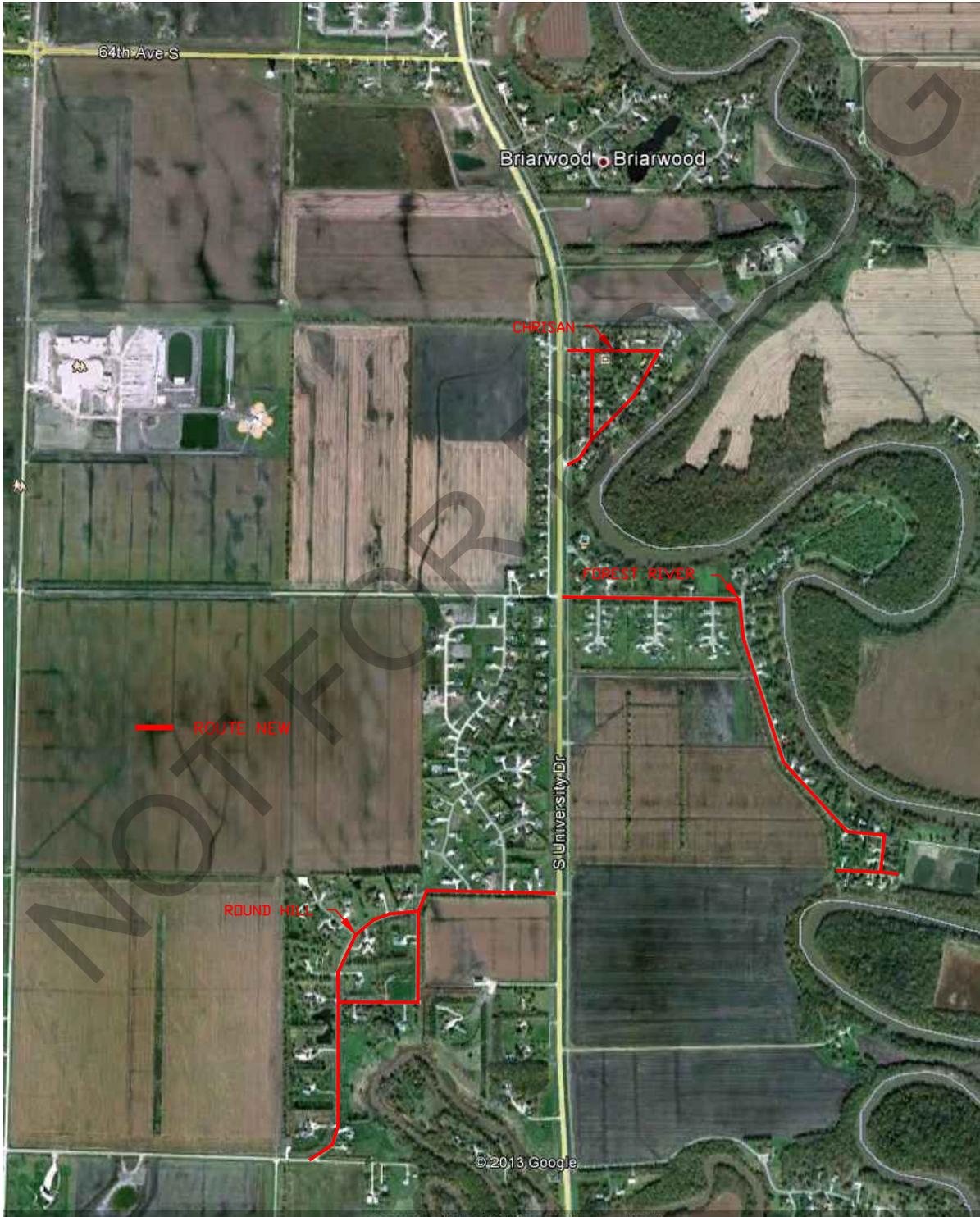
Hwy.	LOCATION	Total Segment Length (Miles)	Total (lbs)	Method
5	Hwy 32 to I-94	8.0	16,500	Route New
5	I-94 to Hwy 6	6.8	23,978	Route New
6	Hwy 38 to Barnes Co. Line	6.0	14,770	Route New
6	2 Miles East of Hwy 38 to 1 Mile East	1.0	3,260	Route New
10	Hwy 5 to State Hwy 18	6.0	2,196	Blow & Go Existing
11	Carl Olson Street to I-94	0.3	468	Route New - Blow & Go Existing
11	Hwy 22 to Hwy 10 East	5.0	10,313	Blow & Go Existing
16	Hwy 15 to Hwy 17	5.0	2,245	Route New - Blow & Go Existing
17	Hwy 16 to State Hwy 46	6.0	2,744	Route New - Blow & Go Existing
17	I-29 to Hwy 10 (12th Ave N.)	6.5	3,135	Blow & Go Existing
26	State Hwy 38 to Hwy 5 North	8.0	17,831	Route New
32	Hwy 5 West to Absaraka	1.6	3,300	Route New
38	1.5 Miles South of Alice to 0.7 Miles South	0.7	210	Route New
81	C-20 to 2 Miles North of C-4	11.0	22,688	Blow & Go Existing
81	Hwy 16 West to State Hwy 46	6.3	2,410	Route New - Blow & Go Existing
	Chrisan, Round Hill, & Forest River	2.8	8,233	Route New
		Total =	134,281	lbs.

2013 CRACK SEAL CASS COUNTY PROJECT NO. CH1307 LOCATION MAP



- BLOW & GO EXISTING (CONCRETE)
- ROUTE NEW
- ROUTE NEW / BLOW & GO EXISTING
- ROUTE NEW / BLOW & GO EXISTING (2013 CHIP SEAL PROJECTS)

2013 CRACK SEAL
CASS COUNTY
PROJECT NO. CH1307 LOCATION MAP



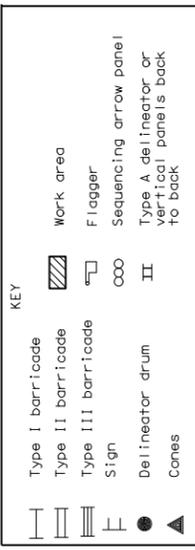
CONSTRUCTION SIGN AND BARRICADE LOCATION DETAILS

Notes
1. Variables
S = Numerical value of speed limit or 85th percentile.
W = The width of taper.
L = Minimum length of taper, or S x W for freeways, expressways, and all other roads with speeds of 45 mph or greater, or W x S/60 for urban, residential, and other streets with speeds of 40 mph or less.

- Barricade shown to be placed on roadway shall be on a moveable assembly. Sign to be mounted on barricades shall be mounted with the sign bottom on the top of the top barricade bar. Sign shown to be placed on roadway shall be placed on skid mounted assemblies.
- Delinctor drums, barricades or cones used for tapering traffic shall be spaced at the dimension "S". Delinctor drums or cones used for tapering traffic shall be spaced at 2 times dimension "S".
- Existing striping shall be removed as required. Delinctors will only be used when for slope is 1:4H or better and roadway alignment is visible to approaching vehicles. Vertical panels shall be used where roadways has steep slopes and alignment is not visible to approaching vehicles. Delinctors and vertical panels shall be installed back to back.
- Sequencing Arrow Panels
Panels should normally be placed at the beginning of the taper. Where shoulder width does not provide sufficient room, the panel should be moved closer to the work area so that it can be placed on the roadway surface. Type A shall be used on roadways with slow moving traffic speeds and low volume (25 mph and 750 ADT or less). Type B shall be used on roadways with moderate traffic speeds and volumes (40 mph and 5000 ADT or less). Type C shall be used on roadways with high traffic speeds and volumes (over 40 mph and 5000 ADT).
- The speed limit shall be re-established. The exact speed limit shall be determined in the field, dependent on location and conditions. The reduced speed limit shall be determined dependent on the in place speed limit before construction. The speed limit reduction should not exceed 10 mph below the existing speed limit, unless the design speed of the work zone feature has been reduced below the 10 mph. In this case, the speed limit reduction shall not exceed 30 MPH. Where speed limits are to be reduced more than 30 MPH, a second speed limit sign shall be installed with the desired speed reduction but shall not exceed 30 MPH. The second speed limit sign shall be placed at 1/2 B.
- Use when work area is 1 mile or longer.
- When warning signs are used in urban areas and the signs are not portable, flags shall be installed. The flags shall be 24 inches square, mounted perpendicular to the edges of the diamond sign, and at such a distance above the edge so that when the flag is limp it will not touch the sign. Rural areas will not require flags.
- Existing speed limit signs within a reduced speed zone shall be covered.
- Obliterated or covered pavement marking shall be paid for as obliteration of Pavement Marking. The covering shall be approved by the Engineer.
- Where necessary, safe speed to be determined by the Engineer.
- The contractor has the option of using portable sign supports in lieu of post mounted sign as shown on the standard drawings as specified in section 704.03 C.

ADVANCE WARNING SIGN SPACING

Road Type	Distance Between Signs		
	A	B	C
Urban - Low Speed (30 mph or less)	150	150	150
Urban - Low Speed (over 30 to 40 mph)	280	280	280
Urban - High Speed (over 40 mph to 50 mph)	360	360	360
Rural - High Speed (over 50 mph to 65 mph)	720	720	720
Urban Expressway and Freeway (55 mph to 60 mph)	850	1350	2200
Rural Expressway and Freeway (70 mph to 75 mph)	1000	1500	2640
Interstate/4-Lane Divided (Maintenance and Surveying)	750	1000	1500



NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 10-1-86

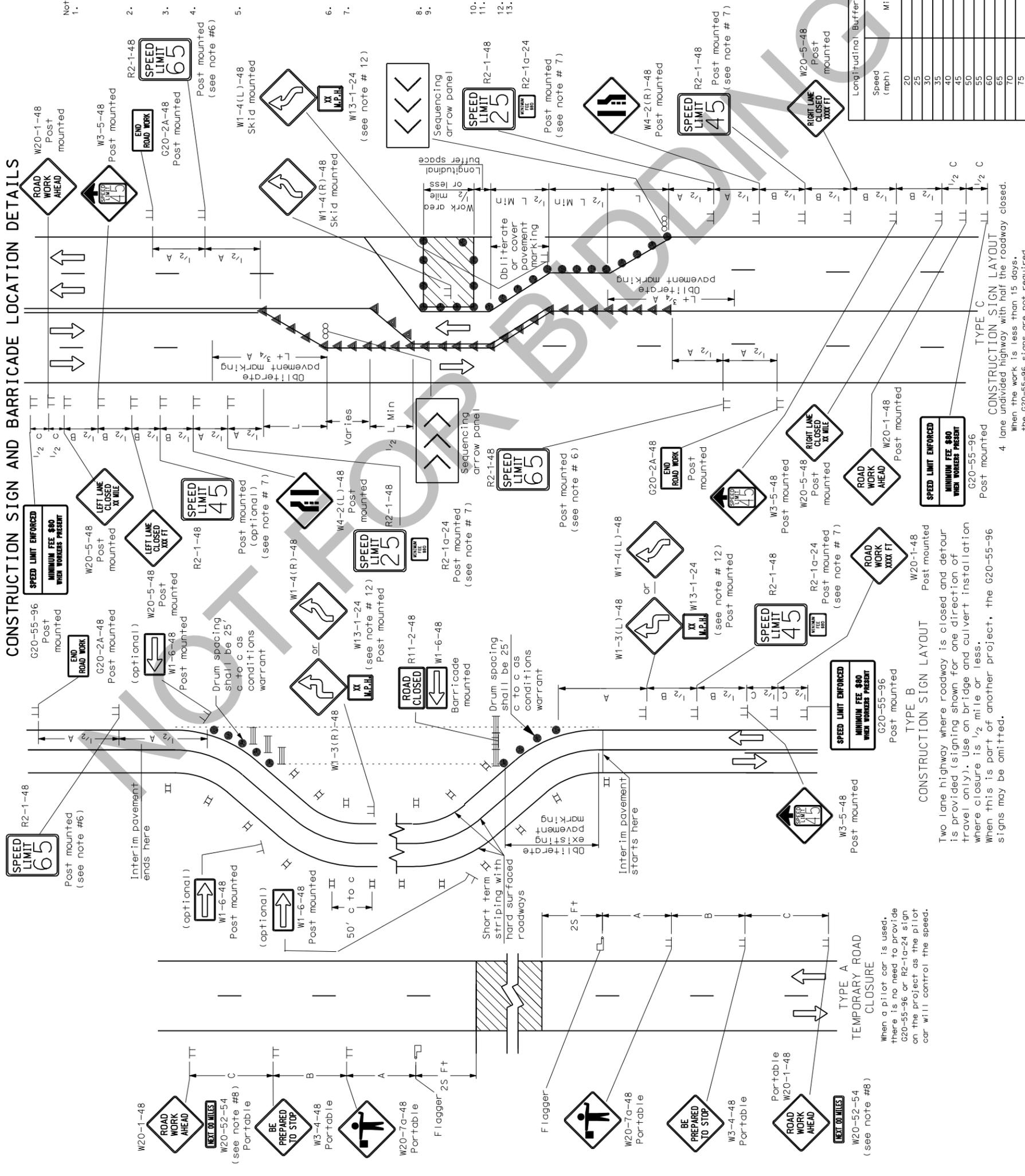
REVISIONS

DATE	CHANGE
01-05-01	Revised note 3
07-19-02	Revised End Road Work & Speed Signs
07-25-03	Revised R2-1, R2-1a and W20-1
04-01-04	Change Fee Sign, Warning & Buffer Spacing
12-18-03	Relocated reverse curve
12-01-04	PE stamp added
06-29-05	Revised W4-2, Relocated R2-5a with W3-5, Rev. Adv. Warning Table, Rev. Note 7.
07-05-05	Changed W20-7b to W3-4

This document was originally issued and sealed by Mark S Gaydos Registration Number PE-4518, on 07/05/05 and the original document is stored at the North Dakota Department of Transportation

Longitudinal Buffer Space

Speed (mph)	Length Min (feet)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820



PROPOSAL

Note: The envelope containing this proposal should be marked:

“BID FOR CRACK CLEAN AND SEAL”, in Cass County.

(Proposal of - Name)_____

(Address)_____

To furnish and deliver all materials and to do and perform all work, in accordance with the Standard Specifications, adopted by North Dakota Department of Transportation October 2008, Standard Drawings currently in effect, and other contract provisions submitted herewith of the North Dakota Department of Transportation except as specifically stated otherwise in the "Special Provisions" contained therein, for the improvement of a certain Public Highway in Cass County, State of North Dakota, on which proposals will be received until 10:00 o'clock A.M., on the 28th day of February 2013, this highway being known as Cass County Project Number CH1307. Said project being situated as follows: Beginning at various locations on highways in Cass County, as indicated on the plans.

NOT FOR BIDDING

PROPOSAL

COUNTY PROJECT NUMBER: CH1307

TYPE: Crack Clean and Seal

To The Chairman:
Cass County Board of Commissioners
Fargo, North Dakota

In accordance with the advertisement and notice to bidders from the Cass County Highway Department inviting proposals for the work on the project described above, the Bidder proposes to furnish all materials specified, and perform all work in the manner and at the time prescribed. The Bidder understands the quantities of work shown herein are approximate only, and are subject to increase or decrease. The bidder further understands that all quantities of work, whether increased or decreased, are to be performed at the unit prices proposed herein (except as otherwise provided in the contract documents).

The bid schedule, time for completion, other provisions, and bidder's affidavit follows:

NOT FOR BIDDING

PROPOSAL

BID SCHEDULE FOR COUNTY PROJECT NUMBER CH1307

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.

Spec. No.	Item No.	Description	Unit & Approx. Qty.	<u>Unit Price</u>		<u>Amount</u>	
				\$\$\$\$	000	\$\$\$\$	000
950	001	Route Crack Clean and Seal	LBS 134,281				

TOTAL = \$ _____

RECEIPT OF ADDENDUMS

NO. 1 _____

NO. 2 _____

NO. 3 _____

NOT FOR BIDDING

PROPOSAL

COUNTY PROJECT NUMBER: CH1307

TYPE: Crack Clean and Seal

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: N/A working days, counted as provided in Standard Specification No. 108.04. Working days will be counted from N/A or from the actual date on which on-site work is started, whichever is earlier.

COMPLETION DATE CONTRACT: As provided in Standard Specification No. 108.04, all work to be completed by.

COMPLETION DATE CONTRACT: As provided in Standard Specification No. 108.04, completion dates this year's sealcoat projects are as follows: **June 1, 2013** for **Hwy 16** from Hwy 15 to Hwy 17, **Hwy 17** from Hwy 16 to State Hwy 46, & **Hwy 38** from 1.5 miles south of the city of Alice to 0.7 miles south. The remainder of highways all work to be completed prior to **June 30, 2012**.

NOT FOR BIDDING

PROPOSAL

COUNTY PROJECT NUMBER: CH1307

TYPE: Crack Clean and Seal

CONTRACT EXECUTION:

The undersigned Bidder agrees, if awarded the contract, to execute the contract form and furnish a contract bond within ten days, as determined by N.D.C.C Section 1-02-15, after date of notice of tentative 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 he/she is an authorized representative

Of _____

Of _____, a

___ Individual ___ Partnership ___ Joint Venture ___ Corporation

and that the said bidder has examined and carefully prepared its bid from the plans and specifications and has checked the same in detail before submitting said proposal or bid; and that the said bidder or its agents, office, or employees have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal or bid.

_____,

Title _____

Bidder must sign on this line

Subscribed and sworn to
before me this day

Type or Print Signature

_____ County, _____

Notary Public

My commission expires _____