# North Dakota Department of Transportation

Bid Number: 760-06-16-050

Bid Opening Date & Time: 08/10/2016 02:00 PM

Items: Cutting Edges

Bid Mailing Address: 608 East Boulevard Avenue

Telephone Number: 701-328-4466

City, State, Zip: Bismarck, North Dakota, 58505

Email: vbrosten@nd.gov

Contract Period: 08/15/2016 TO 07/31/2017

Date Prepared: 07/22/2016

#### **BID RESPONSE**

Please submit your bid response on the attached forms in conformance with the instructions and specifications in the NDAC 04-12-01 – 04-12-16. One copy of your bid response must be returned to the North Dakota Department of Transportation (NDDOT) prior to the time and date specified for the bid opening. Bid responses received after the time and day specified for the bid opening will be rejected. Mark envelope with word "BID" and the opening time and date. If your bid response is accepted by NDDOT, then your bid response will constitute a binding contract.

CONTRACT
This contract is made and entered into by and between NDDOT for the state of North Dakota (hereinafter state) and

### Vendor Address Vendor Name KUEDER NORTH HNERICA 171 CHURCH ST. SUITE 300 CHARLESTON SC29401 (hereinafter vendor). In consideration of and for the acceptance by the state of the offer made by the vendor pursuant to the bid response, the vendor agrees and promises to sell, furnish, and deliver to the state, at the time, places, and prices specified in the bid response, all goods, merchandise, supplies, commodities, equipment, or other items contained in the bid response and for which the vendor has been awarded this contract by the state. The vendor shall fully perform this contract in accordance with the terms and conditions contained in the bid response including all specifications, rules, or regulations mentioned therein, and shall comply with all applicable provisions of the NDAC 04-12-01 - 04-12-16 promulgated by the State Purchasing Division; such manual being made a part of this contract by reference. The Risk Management Appendix and Appendices A and E of the Title VI Assurances, attached, are hereby incorporated into and made a part of this agreement. The following must be completed by the vendor; failure to do so may result in the rejection of the vendors bid proposal. Vendor Name SUEPER Mailing Address CHARLESTON SC 29401 E-mail Address SUITE 300 Fax Number Telephone Number PSChuster @ Kurperblades.com GARDINER F. WILLIS, MANAGING Name & Title (Type or Print) To be signed by Owner; Partner; Corp. Pres., Vice Pres., or other authorized Corp. Officer or bid may be rejected. (if signed by other authorized Corp. Officer, please attach copy of Power of Attorney or

Authorized Signature

Recommended for approval

Part | Par

NDD9T North Dakota Department of Transportation CLA 7480 (Div. 50)

other documentation showing authority to sign.)

#### MAILING INSTRUCTIONS

Mail only one completed and signed request for bid document per envelope, unless instructed otherwise. Request for bid documents not signed or received after the date and time specified in the request for bid will be rejected.

BID IS: ⊠ SEALED ☐ NOT SEALED

Address the envelope containing your response in the following manner:

BID NUMBER - 760-06-16-050
BID OPENING DATE/TIME - August 10, 2016; 2:00 p.m.
N. D. DEPT. OF TRANSPORTATION
PROCUREMENT
608 EAST BOULEVARD AVENUE
BISMARCK ND 58505-0700

Sealed bids will be received for furnishing "CUTTING EDGES" as per the following instructions and specifications. To be considered, this bid form must be completed in its entirety and received by the North Dakota Department of Transportation (NDDOT) no later than , at which time and place such bids will be properly opened and read.

#### **BIDDERS INSTRUCTIONS**

- 1. <u>Assistance to Bidders with a Disability.</u> Bidders with a disability and/or language assistance, contact Civil Rights Division, NDDOT, 701-328-2978 or an included accommodations can be made. Additionally, the Request for Reasonable Accommodations form (SFN 60135) can be accessed at the following NDDOT website location:
- 2. <u>Award.</u> Award will be made to a responsive, responsible bidder with the lowest price considering conformity with specifications, terms of delivery, quality, and serviceability. NDDOT reserves the right to consider bids varying in minor respects from any specific requirements herein, but judged to meet the intent of this request. Award will be made as follows:
  - · Split award per item.
- 2. <u>Bid Bond.</u> Waived in this instance: however, bidder(s) failing to enter into a contract with this office, upon notification of award, may be subject to removal from the bidder's list.
- 3. <u>Bid Held Firm.</u> Bids are not awarded at the bid opening. Bid responses will be firm for 30 days, unless stated otherwise.
- 4. <u>Bid Opening.</u> All <u>sealed</u> bids received by the NDDOT Procurement Office will be opened and read at 608 East Boulevard Avenue, Bismarck, North Dakota, at the time specified in the solicitation. Interested parties are invited to attend the bid opening.
- 5. <u>Bid Summary.</u> Bid summaries are available when the bid has been awarded. When bids are issued using the State's electronic bidding system, the bid summary will be posted and available for download from:

Bid summaries will be mailed to those bidders who supply a self-addressed, stamped envelope with their bid response. A copy of the bid summary may also be obtained by visiting the NDDOT Procurement Office during normal working hours.

- 6. Bidder Checklist. HAVE YOU REMEMBERED TO:
  - Review all instructions, terms and conditions, and specifications to ensure your bid response complies?
  - Prepare your price in the specified unit of measure, F.O.B. Destination, Freight Prepaid to the delivery location listed on the cover sheet?
  - Indicate whether you can meet the delivery date indicated on the cover sheet?
  - Sign your bid response on the cover sheet?
  - · Initial all changes and corrections?
  - Submit any required samples or enclosures, if applicable?
  - · Mark the envelope as indicated above?
  - Review and complete all requirements contained in this solicitation to ensure compliance.
- 7. <u>Clarifications, Bid Changes and Questions Deadline.</u> The Procurement Officer is the point of contact. <u>Any irregularities, lack of clarity, requested bid changes and all questions regarding this bid and the procurement process must be addressed to the Procurement Officer referenced on the first page of this document</u>

(Contact information is indicated on cover page). If a bid amendment is required, it will generally be issued after this date.

The bidder is cautioned that the requirement of this solicitation can be altered only by written amendments and that verbal communications from whatever source are of no effect.

8. <u>Corrections.</u> The bidder's authorized representative must initial any corrections and alterations (i.e. erasures, whiteouts, correction tape, etc.) made to the bid response. Those bid responses with corrections and alterations that are not initialed are subject to confirmation by the Procurement Officer.

#### 9. Definitions.

- Bidder any person or firm submitting a competitive bid in response to a solicitation.
- Bid summary a summary of all bid responses received by the NDDOT Procurement Office.
- Bid response the executed document submitted by a bidder in response to a solicitation.
- Contract a deliberate written agreement between two or more competent persons to perform specific act or acts.
- Contractor any person or firm having a contract with a governmental body.
- Initial order Order placed by Procurement Office after contract start and after each contract extension.
- Solicitation the process of notifying prospective bidders that the State wishes to receive bids for furnishing goods or services.
- 10. <u>Electronic & Facsimile Bids.</u> Bid responses are not to be email attached or faxed to the NDDOT unless this transmittal method has been authorized by the Procurement Officer or bid document. (Contact the Procurement officer regarding additional requirements and exceptions.) Bid responses electronically submitted or faxed may be rejected as non-responsive. Bids may be faxed to a third party who will put it in a properly-addressed envelope and deliver it to the NDDOT Procurement Office before the date and time specified in the solicitation.
- 11. <u>Freight/F.O.B. Destination.</u> Freight and transportation charges are to be included in the price of the products, unless otherwise specified in the solicitation. (F.O.B. Free On Board).
- 12. <u>Indemnification.</u> Bidders must review the attached Risk Management Appendix for indemnification and insurance requirements. The indemnification and insurance provisions are incorporated and made part of this solicitation and the resultant final contract. Objections to any of the provisions of the indemnification and insurance requirements must be made in writing to the attention of the Procurement Officer by the time and date set for receipt of questions. No alteration of these provisions will be permitted without prior written approval from the Purchasing Agency or Entity in consultation with the North Dakota Risk Management Division. Upon receipt of the Notice of Award, the successful bidder must obtain the required insurance coverage and provide the Procurement Officer with proof of coverage prior to contract approval. The coverage must be satisfactory to the Purchasing Agency or Entity, in consultation with the North Dakota Risk Management Division. A bidder's failure to provide evidence of insurance coverage is a material breach and grounds for withdrawal of the award or termination of the contract.
- 13. <u>Late Bids.</u> It is the bidder's responsibility to ensure that a bid response is physically deposited with the NDDOT Procurement Office prior to the date and time specified for the opening. Late bid responses will not be opened and will be rejected and returned regardless of the degree of lateness or the reasons.

- 14. <u>Minor Informalities.</u> The State reserves the right to waive minor informalities in bid responses in accordance with N.D.A.C. 4-12-10. Minor informalities are insignificant omissions or nonjudgmental mistakes that are matters of form rather than substance, evident from the bid document, with a negligible effect on price, quantity, quality, delivery, or contractual conditions that can be waived or corrected without prejudice to other bidders.
- 15. <u>Multiple Bid(s)</u>. Bidders may submit more than one bid response(s) for the item(s) specified in the solicitation. Each bid submitted must comply in all aspects with the bid requirements and these instructions.
- 16. <u>Negotiation.</u> NDDOT reserves the right to negotiate with the successful bidder to ensure the best possible consideration is afforded to all concerned.
- 17. <u>New Equipment and Materials</u>. Unless otherwise indicated in the detailed specifications of this solicitation, all equipment and materials shall be new and under current production for use in the United States.
- 18. <u>Open Records.</u> After the bid opening, bid documents will be subject to the North Dakota open records law. Records are closed or confidential only if specifically stated in law. If a request for public information is received, the procurement officer will determine whether the information is an exception to the North Dakota open records law, and the information will be processed appropriately. Those interested in reviewing the bid file are to make arrangements with the NDDOT Procurement Office. The NDDOT Procurement Office hours are 8:00 a.m. 12:00 p.m. and 1:00 p.m. 5:00 p.m. Monday through Friday.
- 19. <u>Packaging.</u> All shipments are to be packaged according to accepted commercial practices to avoid damage in shipment.
- 20. <u>Performance Bond.</u> Successful bidders will not be required to furnish a performance bond; however, failure to perform satisfactorily will result in the immediate termination of the contract(s) and bidders may be subject to removal from the bidder's list.
- 21. <u>Preparation of Bid</u>: Bids will be accepted on NDDOT forms only. The bidder's name shall be printed or typed on each sheet on which an entry is made. Bidders are cautioned to examine specifications and all instructions. Failure to do so will be at the bidder's risk. Any irregularities or lack of clarity in the invitation for bid must be brought to the attention of the Procurement Officer (Telephone: 701-328-4466, Fax: 701-328-0310, E-mail: vbrosten@nd.gov) as soon as possible. <u>Bidders shall indicate the manufacturer and provide complete specifications for materials being supplied at the time the bid is submitted. No bidder will be allowed to change any specification after the bid opening.</u>
- 22. **Pricing.** Unit prices are to be stated in United States currency and based on the unit of measurement specified in the solicitation, F.O.B. Destination, to the NDDOT delivery locations specified herein.

In the event of mathematical differences between the unit price and extended total, the unit price will prevail.

- 23. <u>Protest of Award.</u> An interested party may protest the award within seven days after receiving notice in accordance with N.D.C.C. 54-44.4-12 and N.D.A.C. 4-12-14. Notice of award will be issued only to those bidders who submitted responses to this IFB. Seven calendar days after award or issuance of the Notice of Intent to Award; it will be assumed that all interested parties knew or should have known all the facts surrounding the award.
- 24. Rejection. Bid responses may be rejected if:
  - The bid response is not legible.
  - The bid response is not completed as requested.
  - The bid response is faxed to the procurement office.
  - The bid response is not responsive to the specifications or other requirements of the solicitation.
  - The bid response is received after the time and date specified.
  - The bidder has not met Vendor Registration requirements or is suspended or debarred.
  - The bid document has been altered by the bidder.
  - The bidder is determined to be not responsible (N.D.A.C. 4-12-11-04).
- 25. <u>Signature.</u> The bid must be signed manually in ink. The name and title of the person signing the bid response must be typed or printed above the signature. The bid must be signed by **or other authorized Corp. Officer** or the bid may be rejected. If signed by other authorized Corp. Officer or representative, please attach a letter signed by the Owner, Partner, Corp. Pres., or Vice Pres. indicating the

individual has authority to enter into a contract on behalf of the company (or a Power of Attorney).

- 26. **Specifications, Brand Name or Equivalent**. Unless otherwise indicated in the detailed specifications of this solicitation, the use of a specific brand name or make/model is for illustrative purposes only, and the State will consider equivalent products. If a commodity or service put forth by a bidder is rejected as not being equivalent, the Procurement Officer will notify the bidder of the rejection.
- 27. Specifications, Compliance. All bids submitted in response to this Invitation for Bid must comply with the specifications contained herein, and the successful bidder will be held responsible. Noncompliance with specifications is grounds for rejection of the bid response. Bidders who desire to submit commodities or services that deviate from these specifications or have any objections to the specifications stated herein must be clearly pointed out ; otherwise, it will be considered that the items offered are in strict compliance with these specifications, and the bidder will be held responsible.
- 28. <u>Supplemental Terms and Conditions.</u> Bids including <u>supplemental</u> terms and conditions will be accepted, but supplemental conditions that conflict with any conditions contained in this ITB or that diminish the State's rights will be considered null and void. The State is not responsible for identifying conflicting supplemental terms and conditions before issuing a contract award.

After award of contract:

- a) If a conflict arises between a supplemental term or condition included in the bid and a term or condition of the ITB, the term or condition of the ITB will prevail, and,
- b) If the State's rights would be diminished as a result of application of a supplemental term or condition included in the bid, the supplemental term or condition will be considered null and void.

Changes, modifications, additions, or alterations to the bid document could be cause for rejection of the submitted bid at the sole discretion of the NDDOT. Contact the Procurement Officer in writing prior to the deadline for clarifications.

- 29. <u>Taxes.</u> The State does not pay sales tax or federal excise tax. The state sales tax exemption number is E-2001. The federal tax-free transaction number is 45-70-0010K. The Purchasing Agency will furnish a tax exempt certificate upon request.
- 30. <u>Vendor Registration</u>. Bids will be accepted from bidders who are not currently Approved Bidders for the State of North Dakota; however, the successful bidder may be required to become approved prior to award, in accordance with N.D.C.C. 54-44.4-09. To become an Approved Bidder, you must: 1) register with the North Dakota Secretary of State (fees apply), and 2) submit a completed Bidder List Application to the ND State Procurement Office. Registration instructions and forms are available on-line at: <a href="www.nd.gov/spo/vendor">www.nd.gov/spo/vendor</a>. Contact the ND State Procurement Office at 701-328-2683 or <a href="mailto:infospo@nd.gov">infospo@nd.gov</a> for assistance.

Placement on the bidders list does not guarantee a bidder will receive notice of every formal solicitation. Bidders must maintain current information by submitting a Notice of Change form to the State Procurement Office (Fax 701-328-1615). Visit the website for forms: www.nd.gov/spo/vendor.

- 31. Withdrawal or changes to a bid response prior to the bid opening date and time. A bidder may withdraw or make a change to his bid response prior to the bid opening date and time. The request to make a change or withdraw must be in writing by a representative of the firm. The request to withdraw or change must be signed by the bidder or his designated representatives.
- 32. Withdrawals after the bid opening date and time. After the bid opening, no changes may be made to the bid response. The bidder may make a written request to withdraw the bid response, subject to approval by the NDDOT Procurement Office. Vendors continually withdrawing bids after the bid opening may be removed from the Vendor Database.

#### **GENERAL CONTRACT TERMS AND CONDITIONS**

- 1. <u>Affirmative Action.</u> The contractor will take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of individuals with disabilities, and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin, or disability.
- 2. Applicable Law and Venue. Any dispute arising out of this agreement will be resolved under the laws of the State of North Dakota.
- 3. <u>Billing and Payment Procedures.</u> The initial order will be issued by NDDOT Procurement Office. Reorders may be placed by the individual NDDOT district locations during the contract period.

Invoices are to be submitted as indicated on the purchase orders unless otherwise instructed. Since all invoices must be processed by individual NDDOT districts before payment is made, submission of these items to this office may delay payment. Failure to submit correct invoices to the appropriate NDDOT office may delay contractor payment.

Payment will normally be made within thirty days after delivery and acceptance of commodities or services under this contract and receipt of a correct invoice. All invoice and payment inquiries must be directed to the purchasing agency.

- 4. <u>Binding Contract.</u> The acceptance of a bid response in writing by the purchasing agency constitutes a contract between the bidder and the State. Written acceptance from the purchasing agency will be in the form of a purchase order, notification of award, or contract. Any oral agreement or arrangement by a bidder with a State employee or purchasing agency will have no force or effect unless reduced to writing.
- 5. Compliance with Laws. The contractor must, in performance of work under this contract, fully comply with all applicable federal, state or local laws, rules, regulations and policies, including those relating to nondiscrimination, affirmative action, accessibility and civil rights including Title VI of the Civil Rights Act of 1964. The contractor agrees to file all required reports on time, to make required payroll deductions, and to pay all taxes and premiums owed on time, including sales and use taxes and unemployment compensation and workers' compensation premiums. The contractor shall have and keep current at all times during the term of this contract all licenses and permits required by law.
- 6. <u>Contract Amendments, Waivers.</u> After a binding contract has been entered into, no changes (i.e. additions, substitutions, subcontracting or a price adjustment) may be made, unless prior approval has been obtained from the purchasing agency and Procurement Officer.

The terms of this contract shall not be waived, altered, modified, supplemented, or amended, in any manner whatsoever, except by written instrument signed by the parties. No waiver consent, modification or change of terms of this agreement shall bind either party unless in writing and signed by both parties. Such waiver, consent, modification, or change, if made shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this agreement.

7. <u>Contract Price Adjustment:</u> The Contract Unit Prices shall be firm for the initial order. The initial price shall be used to purchase the quantities specified in the bid document.

Reorder prices shall be provided in the bid document based on the current price of raw materials. Thereafter, all unit reorder prices may be subject to price adjustment (increase / decrease). The request for a price adjustment must be submitted to the Procurement Office at least fifteen (15) days before the requested implementation date. Any request for an increase in price must include a justification with supporting documentation for the proposed change. The Procurement Officer will respond as follows:

- (1) The request may be granted,
- (2) The contract may be cancelled and solicitation may be re-advertised
- (3) The contract may be continued without change.

If a price increase is approved by the NDDOT, the date the increase will be effective along with the new unit prices will be included in a contract amendment document. The adjusted price will be firm through the balance of the contract or for a minimum period of 30 days.

The State shall also be advised of and receive the benefit of any price decrease. The same notification and review process will apply to a decrease in cost.

7. Contract Term and Renewal Option. The NDDOT will enter into a contract with an effective date beginning August 15, 2016, and ending July 31, 2017, inclusive. This contract may be renewed upon satisfactory completion of the initial contract term. The NDDOT reserves the right to execute up to two options to renew this contract for a period of twelve (12) months each, not to exceed thirty-six (36) months total. Renewals will be documented by amendment.

The NDDOT reserves the right to renegotiate price and terms provided that such negotiated price and terms fall within the original scope of work for this bid. Negotiations may be conducted annually or at such times that additional and unexpected services falling within the scope of the contract may occur. Such changes will be documented by amendment to the contract.

#### 8. Contract Termination.

- a. **Termination without Cause.** This contract may be terminated by mutual consent of both parties, or by either party upon 30 days' written notice.
- b. **Termination for Lack of Funding or Authority.** The State may terminate this contract effective upon delivery of written notice to the contractor, or on any later date stated in the notice, under any of the following conditions:
  - i. If funding from federal, state, or other sources is not obtained and continued at levels sufficient to allow for purchase of the services or supplies in the indicated quantities or term. The contract may be modified by agreement of the parties in writing to accommodate a reduction in funds.
  - ii. If federal or state regulations or guidelines are modified, changed or interpreted in such a way that the services are no longer allowable or appropriate for purchase under this contract or are no longer eligible for the funding proposed for payments authorized by this contract.
  - iii. If any license or certificate required by law or regulation to be held by the contractor to provide the services required by the contract is for any reason denied, revoked or not renewed.

Any such termination of this contract under (i), (ii), or (iii), above, shall be without prejudice to any obligations or liabilities of either party already accrued prior to such termination.

- c. **Termination for Cause.** The State by written notice to the contractor may terminate the whole or any part of this contract:
  - i. If the contractor fails to provide services required by this contract within the time specified herein or any extension thereof; or
  - ii. If the contractor fails to perform any of the other provisions of this contract, or so fails to pursue the work as to endanger performance of this contract in accordance with its terms and after receipt of written notice from the State, fails to correct such failures within ten days or such longer period as NDDOT may authorize.
  - iii. The rights and remedies of the State provided in the above clause related to defaults by the contractor are not exclusive and are in addition to any other rights and remedies provided by law or under this contract.
- d. **Termination, Deliveries.** If the contract is terminated for any reason, the contractor is responsible for delivery of all commodities and services ordered prior to the termination, unless those orders had been canceled by the Purchasing Agency or Entity.
- 9. <u>Inspection and Investigations.</u> The State reserves the right to conduct inspections and investigations related to the bidder and offered commodities or services, including but not limited to the firm, its facility, personnel, qualifications, and the commodities and/or services offered to make determinations regarding compliance with the bid requirements and responsibility of the bidder.
- 10. <u>Materials and Workmanship</u>. All material and workmanship shall be subject to inspection and testing at the discretion of the purchasing agency either at the point of manufacturer, place of storage, or upon receipt.

11. <u>Receiving.</u> Deliveries must arrive at the designated destination(s) during normal business hours unless other shipping/receiving instructions are issued by NDDOT personnel. The contractor shall contact the NDDOT to schedule delivery dates and times at least 24 hours in advance of delivery.

All NDDOT offices will be closed in recognition of State holidays. Any day declared a holiday by the President or Governor will also be recognized by office closure.

- 12. <u>Subcontracts, Assignment.</u> The contractor shall not subcontract, assign or transfer the contractor's interests or duties under this contract without express written consent of the purchasing agency. However, the contractor may enter into subcontracts provided that any such subcontractor acknowledges the binding nature of this contract and incorporates this contract, including any attachments. The contractor is solely responsible for the performance of any subcontractor. The contractor shall not have the authority to contract for or incur obligations on behalf of the State.
- 13. <u>Successors in Interest.</u> The provisions of this agreement shall be binding upon and shall inure to the benefit of the parties hereto, and their respective successors and assigns.
- 14. <u>Specifications</u>: <u>Bidder's shall submit detailed manufacturer's specifications along with this response,</u> and upon acceptance of the bid, shall become part of the bidder's specifications. Specifications must include: brand, composition, blade analysis, hardness rating, design, dimensions, weight, etc. Promotional literature is generally not adequate. Any discrepancies between products to be furnished on the bid and manufacturer's printed specification must be documented.
- 15. <u>Testing and acceptance:</u> Blades may be tested upon delivery to ensure compliance with specifications prior to payment. The testing procedure requires approximately sixty (60) days. Materials failing to meet specifications will be returned at the bidder's expense.

If the cutting edges fail to meet the requirement of the specifications, they will be rejected and the material returned to the Vendor without any charges to the Department.

<ul> <li>a. Reimbursement for unused cutting edges.</li> <li>b. Return shipping at no cost to NDDOT.</li> <li>c. If a restocking fee applies, indicate the percentage of the purchased value here:</li></ul>
16. <u>Service Representative.</u> The contractor must provide a dedicated customer service representative to provide support for this contract. The contractor shall notify the Procurement Officer in the event the representative is changed.
NAME: ATRICIA SCHOSTER  (Name of person servicing this contract)
BUSINESS NAME: KOEPER NORTH HMERICA
MAILING ADDRESS: 171 CHURCH ST. SOITE 300
CITY & STATE: CHARLESTON, SC ZIP CODE: 29401
PHONE NUMBER: 843-723-7361 TOLL FREE:
FAX NUMBER: 843-723-7362 E-MAIL: PSCHUSTERG KUEPERBLADES. CON

# NORTH DAKOTA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR

# SECTIONAL TUNGSTEN CARBIDE-TIPPED CUTTING EDGES SNOWPLOW, MOTOR GRADER, AND UNDERBODY SCRAPER

## BLADE:

- 1. The blades shall be SAE 1020-1045 steel.
- The blades shall be fabricated in various sized sections to provide the lengths indicated on the bid sheet, and shall be manufactured in accordance with the dimensions detailed in ATTACHMENT A.
- 3. Hole-punching shall be <sup>11</sup>/<sub>16</sub>" square, countersunk to receive <sup>5</sup>/<sub>8</sub>" diameter plow bolts or <sup>13</sup>/<sub>16</sub>" square, countersunk to receive <sup>3</sup>/<sub>4</sub>" diameter plow bolts. The hole spacing shall be as per AASHTO standards.
- 4. The finished blade section shall be given one coat of rust resistant lacquer.
- 5. The finished blade sections shall be free of warpage, with the longitudinal deviation not to exceed 1/8" in a four-foot section.
- 6. The complete cutting edge shall consist of a combination of sections, with the two end sections interchangeable.

## **TUNGSTEN CARBIDE INSERTS:**

- 1. The inserts shall be a high W.C. grade of tungsten carbide with 11 to 13 percent cobalt content. The tungsten carbide shall be new; no reclaimed tungsten carbide may be used.
- 2. The density shall be in the range of 14.1 to 14.6.
- 3. The hardness shall be in the range of 87.5 minimum to 89.0 maximum Rockwell "A" scale.
- The transverse rupture strength of the carbide shall be 350,000 psi minimum.
- 5. The dimensions of the insert shall be as shown on the attached drawing, with 1" nominal length.
- 6. The sections shall essentially have 1" of tungsten per each 1" of section. A carbide grade analysis certification shall be submitted with each bid.
- 7. Carbide inserts shall extend a minimum of .010" and a maximum of .040" beyond the leading edge of the blade.
- 8. Carbide inserts shall be 25 degree trap and 3/4" height.
- 9. The supplier shall furnish the Central Office with a certified test result of Rockwell Hardness, Transverse Rupture Strength, Density, and Cobalt Content for each cemented carbide lot or batch, used in fabricating the cutting edges. Each test sample shall meet the specified physical requirements.

## **BRAZING**:

- 1. The braze material strength shall have a minimum tensile strength of 30,000 psi.
- 2. The braze (weld) shear stress in tension to the tungsten carbide insert and the blade base material shall have a minimum shear strength of 25,000 psi.
- 3. The inserts shall be brazed on all sides consistent with sound brazing practice, with no evidence of voids, pin holes, or use of shims.

4. A loss of 6" or more of tungsten carbide inserts per cutting edge during normal usage shall be considered brazing failure.

# SPECIFIC REQUIREMENTS

- 1. The supplier shall also provide written certification that states the cutting edges shipped meet all the requirements contained in the specification.
- 2. Materials and assembly shall be guaranteed with replacement against breakage and brazing failure, as well as satisfactory performance under normal cold weather snow and ice removal operations.

REFERENCE ATTACHMENT B DRAWING

BIDDER KUEPEN NORTH HUERICA

# SECTIONAL TUNGSTEN CARBIDE TIPPED SNOWPLOW CUTTING EDGES 5" HEIGHT, 5/8" BOLT & HOLE PUNCHING

#### **BRAND NAME: MANUFACTURER:** Length Order Price Per District NDDOT Part Quantity **Extended Price** Lineal Foot Each Number 3FT \$ \$ \$ Nobin 76006-365597 Bismarck, ND 58504 4FT \$ \$ \$ 76006-365662 3FT \$ \$ \$ 76006-365597 NO BIA Valley City, ND 58072 4FT \$ \$ \$ NO 310 76006-365662 3FT No BID \$ \$ \$ 76006-365597 Devils Lake, ND 58301 4FT \$ \$ \$ NO BIO 76006-365662 3FT \$ \$ \$ No Bio 76006-365597 Minot, ND 58701 4FT \$ \$ \$ NO Bus 76006-365662 3FT \$ \$ \$ NO BID 76006-365597 Dickinson, ND 58601 4FT \$ \$ \$ NO BIO 76006-365662 3FT \$ \$ \$ No Bub 76006-365597 Grand Forks, ND 58208 4FT \$ \$ \$ NO DO 76006-365662 3FT \$ \$ \$ 76006-365597 Williston, ND 58802 4FT \$ \$ \$ No Bus 76006-365662 3FT \$ \$ \$ No BID 76006-365597 Fargo, ND 58103 4FT \$ \$ \$ Bus 76006-365662 Delivery Days After Receipt of Order: \_ Days LF Minimum order quantity for Reorder price:

Initial Order Delivery Days ARO	11/A	(Not later than October 15
initial Order Delivery Days ARO	14 / K	(NOT rate) than October 13

# SECTIONAL TUNGSTEN CARBIDE TIPPED UNDERBODY SCRAPER CUTTING EDGES

BRAND NAME:					
MANUFACTURER:					
		5" HEIGHT,	5/8" HOLE-PUNCHI	NG	
District	Length NDDOT Part Number	Order Quantity Each	Price Per Lineal Foot	Extended Price	
Riemarck ND 50504	3FT 76006-366009	29	\$ 1/U 720	\$	\$
Bismarck, ND 58504	4FT 76006-366108	51	\$ NO BO	\$	\$
	3FT 76006-366009		\$ No Bio	\$	\$
Valley City, ND 58072	4FT 76006-366108		\$ NO 100	\$	\$
	5FT 76006-366157		\$ NU 7310	\$	\$
Devile Lake ND	3FT 76006-366009 4FT		\$ NO DIO	\$	\$
Devils Lake, ND 58301	76006-366108 5FT		\$ NO BID	\$	\$
	76006-366157 3FT		\$ No Bio	\$	\$
Minot, ND 58701	76006-366009 4FT		\$ 1/6 1300	\$	\$ \$
	76006-366108 3FT		\$ No Bio	\$ \$	\$
Dickinson, ND 58601	76006-366009 4FT		776 1319	\$	\$
DICKINSON, NO SOUCE	76006-366108 5FT		140 1513	\$	\$
Occasion NO	76006-366157 3FT		\$ No Bo	\$	\$
Grand Forks, ND 58208	76006-366009 4FT 76006-366108	200	\$ 1/4 30	\$	\$
Williston, ND 58802	3FT 76006-366009		\$ 1/0 Bis	\$	\$
77 motor, 110 00002	4FT 76006-366108		\$ No Bo	\$	\$
	3FT 76006-366009		\$ 1/6 BO	\$	\$
Fargo, ND 58103	4FT 76006-366108 5FT		\$ 1/6 Bo	\$	\$
	76006-366157		\$ 1/0 Bab	\$	\$
			NITIAL ORDER TOTA 3/4" HOLE-PUNCH		
	3FT	D REIGHT,	1		•
Grand Forks, ND 58208	76006-366009 4FT		\$ 1/6 7510	\$	\$
Delivery Days After Rec	76006-366108	[ [A	\$ IV0 B00 Days	\$	\$
Initial Order Delivery Da	. 1		t later than October 15		
		, /A	LF		
Minimum order quantity for Reorder price: <u>N/₩</u> LF					

BIDDER KUEPEN MORTY AMERICA

# SECTIONAL TUNGSTEN CARBIDE TIPPED MOTOR GRADER CUTTING EDGES

BRAND NAME:					
MANUFACTURER:					
	8	B" HEIGHT,	5/8" HOLE-PUNCHIN	G	
District	Length NDDOT Part Number	Order Quantity Each	Price Per Lineal Foot	Extended Price	
Bismarck, ND	3FT 76006-361604		\$ 1/4 30	\$	\$
58504	4FT 76006-361638		\$ 16 20	\$	\$
Valley City, ND	3FT 76006-361604		\$ 40 Bio	\$	\$
58072	4FT 76006-361638		\$ No Bio	\$	\$
Devils Lake, ND	3FT 76006-361604		\$ No Bio	\$	\$
58301	4FT 76006-361638		\$ No Big	\$	\$
Min -4 NID 59704	3FT 76006-361604		\$ No Bus	\$	\$
Minot, ND 58701	4FT 76006-361638		\$ No Do	\$	\$
Dickinson, ND	3FT 76006-361604		\$ NO 730	\$	\$
58601	4FT 76006-361638		\$ No Dio	\$	\$
MENINE NID ERROR	3FT 76006-361604		\$ No Big	\$	\$
Williston, ND 58802	4FT 76006-361638		\$ No Bio	\$	\$
E	3FT 76006-361604		\$ N/0 B00	\$	\$
Fargo, ND 58103	4FT 76006-361638		\$ 1/6 Bis	\$	\$
8" HEIGHT, 3/4" HOLE-PUNCHING					
Grand Forks, ND	3FT 76006-361604		\$ No Pin	\$	\$
58208	4FT 76006-361638		\$ No Bin	\$	\$
Delivery Days After R	Delivery Days After Receipt of Order:				
Minimum order quantity for Reorder price:					
Thinming of the state of the st					

Initial Order Delivery Days ARO \_\_\_\_\_\_(Not later than October 15)

# NORTH DAKOTA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR THRU-HARDENED STEEL VEE-SNOWPLOW EDGE

## **GENERAL SPECIFICATIONS:**

- 1. Cutting edges must be cut in the lengths as specified herein.
- 2. Cutting edge ends shall be square and cleanly cut.
- 3. Cutting edges shall meet minimum 25 Rockwell hardness on the Rockwell C-scale and Brinell hardness minimum 250. Rating must be furnished with the bid.
- 4. Lengths, as noted on the proposal, shall not vary more than ±1/8" specified in order to fit total moldboard length in various combinations.
- 5. Bidder must specify delivery dates.
- 6. Materials and assembly shall be guaranteed with replacement against breakage, as well as satisfactory performance under normal cold weather snow and ice removal operations.

## **VEE-SNOWPLOW CUTTING EDGES:**

- 1. Sizes and length as designated.
- 2. Flat.
- 3. Unpolished.

Brand Name:		
Manufacturer:		
	8" HEIG	SHT X 1/2" THICK
LENGTH DOT PART NUMBER	ORDER PRICE LINEAL FOOT	DELIVERY DAYS AFTER RECEIPT OF ORDER _ N/A
5FT 76006-368005	\$ NO B10	DELIVERY DAYS AFTER RECEIPT OF ORDER
6FT 76006-368104	\$ No Bio	Minimum order quantity for this price = $\frac{N}{A}$ LF
7FT 76006-368153	\$ N. R.	

# KUEPER BRAND CUTTING EDGES TUCA SX - TUNGSTEN CARBIDE/STEEL VULCANIZED IN RUBBER CUTTING EDGES 5/8" HOLE PUNCHING – ALL DISTRICTS

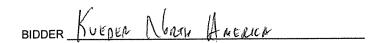
# **General Specifications:**

1. Materials and assembly shall be guaranteed with replacement against breakage, as well as satisfactory performance under normal cold weather snow and ice removal operations.

Delivery Location	Cutting Edge Length Each	NDDOT P/N KUEPER P/N	Initial Order Quantity Each	Initial Order Price Each FOB Destination	Initial Order Extended Price	
Bismarck, ND	3 FT	76006-369155 34855836X	25	\$ 567.00	\$ 14,175.00	\$
58504	4 FT	76006-369177 34855936X	51	\$ 756.00	\$ 38,556.00	\$
Valley City, ND	3 FT	76006-369155 34855836X		\$ 567.00	\$	\$
58072	4 FT	76006-369177 34855936X		\$75600	\$	\$
Devils Lake, ND	3 FT	76006-369155 34855836X		\$ 567.00	\$	\$
58301	4 FT	76006-369177 34855936X		\$ 756.00	\$	\$
N N.D. 50704	3 FT	76006-369155 34855836X		\$ 567.00	\$	\$
Minot, ND 58701	4 FT	76006-369177 34855936X	27	\$ 756.00	\$ 20,412.00	\$
Dickinson, ND	3 FT	76006-369155 34855836X	2	\$ 567.00	\$ 1,134.00	\$
58601	4 FT	76006-369177 34855936X	10	\$ 756.00	\$ 7,560.00	\$
Williston, ND	3 FT	76006-369155 34855836X		\$ 567.00	\$	\$
58802	4 FT	76006-369177 34855936X		\$ 756.00	\$	\$
Grand Forks, ND	3 FT	76006-369155 34855836X		\$ 567.00	\$	\$
58208	4 FT	76006-369177 34855936X		\$ 756.00	\$	\$
F ND 50400	3 FT	76006-369155 34855836X		\$ 567.00	\$	\$
Fargo, ND 58103	4 FT	76006-369177 34855936X		\$ 756-00	\$	\$
INITIAL ORDER TOTAL \$ \$ 81, \$37.00						
TUCA Snowplow Delivery Days After		the cut-to-length ed	ge price for e Days		cludes freight.	

BIDDER KUE	DEA NORTH	Huerick	
	/	(A.)	

TUCA SX UNDERBODY SCRAPER					
DISTRICT	DESCRIPTION	Initial Order Quantity	ORDER PRICE LINEAL FOOT	Extended Price	
	3 Ft, Kueper TUCA SX UB 3485583TX	26	\$ 567,00	\$14,742.00	\$
	4 Ft, Kueper TUCA SX UB 3485593TX	50	\$ 756.00	\$ 37, 800.00	\$
Bismarck, ND 58504	5 Ft, Kueper TUCA SX UB 3485603TX		\$ 945,00	\$	\$
	6 Ft, Kueper TUCA SX UB 3485653TX		\$ 1,/34.00	\$	\$
	3 Ft, Kueper TUCA SX UB 3485583TX		\$ 567.00	\$	\$
Valley City, ND	4 Ft, Kueper TUCA SX UB 3485593TX		\$ 756.00	\$	\$
58072	5 Ft, Kueper TUCA SX UB 3485603TX		\$ 94500	\$	\$
	6 Ft, Kueper TUCA SX UB 3485653TX		\$ 1,/34.00	\$	\$
	3 Ft, Kueper TUCA SX UB 3485583TX		\$ 567.00	\$	\$
Devils Lake, ND	4 Ft, Kueper TUCA SX UB 3485593TX		\$ 756.00	\$	\$
58301	5 Ft, Kueper TUCA SX UB 3485603TX		\$ 945.00	\$	\$
	6 Ft, Kueper TUCA SX UB 3485653TX		\$ 1,134.00	\$	\$
	3 Ft, Kueper TUCA SX UB 3485583TX	6	\$ 567.00	\$ 3,402.00	\$
	4 Ft, Kueper TUCA SX UB 3485593TX	12	\$ 756.00	\$ 9,672.00	\$
Minot, ND 58701	5 Ft, Kueper TUCA SX UB 3485603TX		\$ 94500	\$	\$
	6 Ft, Kueper TUCA SX UB 3485653TX		\$ 1,/3400	\$	\$
	3 Ft, Kueper TUCA SX UB 3485583TX	4	\$ 567.00	\$ 2,268.00	\$
Dickinson, ND	4 Ft, Kueper TUCA SX UB 3485593TX	2	\$ 756.00	\$ 1,512.06	\$
58601	5 Ft, Kueper TUCA SX UB 3485603TX		\$ 94500	\$	\$
	6 Ft, Kueper TUCA SX UB 3485653TX		\$ 1,134.00	\$	\$
	3 Ft, Kueper TUCA SX UB 3485583TX		\$ 567.00	\$	\$
Grand Forks, ND	4 Ft, Kueper TUCA SX UB 3485593TX		\$ 756.00	\$	\$
58208	5 Ft, Kueper TUCA SX UB 3485603TX		\$ \$ 94500	\$	\$
	6 Ft, Kueper TUCA SX UB 3485653TX		\$ 1,134.00	\$	\$
	3 Ft, Kueper TUCA SX UB 3485583TX		\$ 567.00	\$	\$
Millioton ND 50000	4 Ft, Kueper TUCA SX UB 3485593TX		\$ 756.00	\$	\$
Williston, ND 58802	5 Ft, Kueper TUCA SX UB 3485603TX		\$ 945,00	\$	\$
	6 Ft, Kueper TUCA SX UB 3485653TX		\$ 1,134.00	\$	\$
	3 Ft, Kueper TUCA SX UB 3485583TX		\$ 567.00	\$	\$
Forms NID 50402	4 Ft, Kueper TUCA SX UB 3485593TX		\$ 756.00	\$	\$
Fargo, ND 58103	5 Ft, Kueper TUCA SX UB 3485603TX		\$ 945.00	\$	\$
	6 Ft, Kueper TUCA SX UB 3485653TX		\$ /1/34.00	\$	\$



INITIAL ORDER TOTAL	\$
DELIVERY DAYS AFTER RECEIPT OF ORDER	
Minimum order quantity for this price per part number =/O	LF

#### SNOWPLOW BLADE ISOLATED CARBIDE EDGE CUTTING BLADES (I.C.E.)

#### **BLADE**

- 1. The blade shall be fabricated using flat hot-rolled finished steel to meet or exceed specifications for A36 or 1040 type steels.
- 2. Punching shall be 11/16" square holes with countersink to receive 5/8" diameter plow bolts. Location and spacing of the holes shall be as specified by the user. For Standard Highway Punch style spacing refer to the attached drawing.
- 3. Center of bolt holes shall be in line within 1/32" of established horizontal centerline and 1/16" of established vertical centerline.

#### **TUNGSTEN CARBIDE INSERTS**

- 1. The inserts shall be a high shock WC grade of tungsten carbide with (10.5 to 12.5) percent cobalt content.
  - a. Density:
- 13.9 Minimum to 14.6 Maximum
- b. Hardness: 86.8 Minimum to 89.2 Maximum Rockwell. "A" Scale or Equivalent based on appropriate coercive force correlation.
- c. The Maximum Allowable Porosity: (Based on testing in accordance with ASTM designation B276-79) shall be:

80A

**B04** 

C00

- 2. The carbide insert manufacturer to furnish certification to the State Highway Department that the inserts meet the specifications as set forth in 2.1.
- 3. The inserts shall be a cylindrical design with a dome-shaped end of the following dimensions:

a. Height: .753" +/-.007 (long side)

b. Diameter: .523" +/- .004

- c. Bottom Angle: 25 degrees with a nose radius of 1/16" minimum
- 4. A metallurgical evaluation of the carbide insert shall show no evidence of cross grade contamination. Evaluation to be based on a photomicrograph of a polished and etched specimen at 500x magnification.

#### **BRAZING**

- 1. The brazing material shall be a high strength alloy type.
- 2. The tungsten carbide inserts shall be positioned in holes drilled in the center of the thickness of the blade and shall be spaced .75" center to center along the entire length of each cutting edge section.
- 3. The inserts shall be brazed on all sides consistent with sound brazing practice with no evidence of voids in the braze joint.

#### SPECIFIC REQUIREMENTS

- 1. The finished blade section shall be free of warpage and longitudinal deviation not to exceed 1/8" in a four-foot blade section.
- 2. Each blade section shall be identified with manufacturer's identification stamp into the metal or on a label in a non-wear area of the blade.
- 3. Materials and assembly shall be guaranteed with replacement against breakage and brazing failure, as well as satisfactory performance under normal cold weather snow and ice removal operations.

REFERENCE ATTACHMENT C DRAWING



ITB 760-06-16-050, CUTTING EDGES

# SECTIONAL TUNGSTEN CARBIDE INSERTED SNOWPLOW CUTTING EDGES, 5" HEIGHT, 5/8" HOLE-PUNCHING

# Kennametal Isolated Carbide-Edge (I.C.E. Series)

		***	
Brand Name:			
Manufacturer:			
Description	QUANTITY EAG	СН	PRICE PER LINEAL FOOT Less freight
3FT SNOWPLOW CUTTING EDGE and 3FT UNDERBODY SCRAPER CUTTING EDGES  Square Top Edge (Kennametal catalog number PB 536, material	Unknown at this	time <sup>5</sup>	No 710
number 1553693) <u>Beveled Top Edge</u> (Kennametal material number 2035932)			[//O ,
NDDOT 76006-653693			
4FT SNOWPLOW CUTTING EDGE and 4FT UNDERBODY SCRAPER CUTTING EDGES  Square Top Edge (Kennametal catalog number PB 548, material number 1553694)  Beveled Top Edge (Kennametal material number 2035931) NDDOT 76006-654894  Delivery Days After Receipt of Order:  Minimum Order Quantity for price indicated:  Freight TBD at time of purchase.	Unknown at this  N(G	111111111111111111111111111111111111111	6 No 700
QTY. ITEM			HAUT DDICE
CTY. ITEM KENNAMETAL I.C.E. CURB GUARD			UNIT PRICE
BRANDPART NO. (L)			
	PART NO	) (R) _	
Delivery Days After Receipt of Order:  Freight TBD at time of purchase.  Minimum order quantity for this price =	Price E	ech (L)	1: \$ No Bus

BIDDER KEPER NOWN FRANCE

#### SPECIFICATIONS FOR STANDARD CURB GUARD

### **GENERAL SPECIFICATIONS**:

- 1. The Curb Guards shall be SAE 1020-1045 steel.
- Hole-punching shall be 11/16" square, countersunk to receive 5/8" diameter plow bolts or 13/16" square, countersunk to receive 3/4" diameter plow bolts. The hole spacing shall be as per AASHTO.
- 3. The finished Curb Guard shall be given one coat of rust resistant lacquer.
- 4. Must protect moldboard ends from impact.
- 5. Must list Curb Guard for the left and right side of plow.
- 6. Must be carbide reinforced.
- 7. Must provide literature on your Curb Guard.

STANDARD CURB GUARD	
BRANDPAI	RT NO. (L)
PAI	RT NO (R)
Delivery Days After Receipt of Order: Days	Price Each (L): \$ <u>N</u> U るし
Minimum order quantity for this price =EA	- 1100 Edon (1.9. 4

# 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. <u>Compliance with Regulations</u>: 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. <u>Non-discrimination</u>: 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. <u>Solicitations for Subcontracts, Including Procurements of Materials and Equipment</u>: 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. <u>Information and Reports</u>: 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. <u>Sanctions for Noncompliance</u>: In the event of a contractor's noncompliance with the Nondiscrimination 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. <u>Incorporation of Provisions</u>: 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.



# 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.P.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 non-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).



## **Risk Management Appendix**

# Supply Contracts with Private Individuals, Companies, Corporations, Etc.:

Each party agrees to assume its own liability for any and all claims of any nature including all costs, expenses and attorney's fees which may in any manner result from or arise out of this agreement.

Contractor, or Contractor's delivery agent, shall secure and keep in force during the term of this agreement, from insurance companies, government self-insurance pools or government self-retention funds authorized to do business in North Dakota, the following insurance coverages:

- 1) Commercial general liability and automobile liability insurance.
- 2) Workers compensation insurance.

Contractor shall produce certificates of insurance or copies of insurance policies upon request by the State.

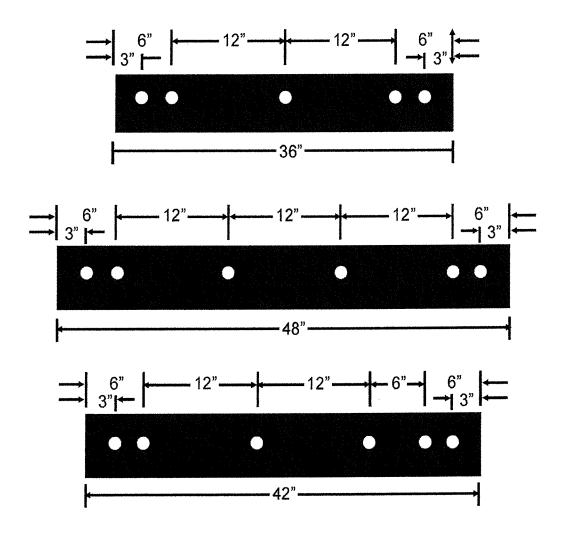
When a portion of a Contract is sublet, the Contractor shall obtain insurance protection (as outlined above) to provide liability coverage to protect the Contractor and the State as a result of work undertaken by the Subcontractor. In addition, the Contractor shall ensure that any and all parties performing work under the Contract are covered by public liability insurance as outlined above. All Subcontractors performing work under the Contract are required to maintain the same scope of insurance required of the Contractor. The Contractor shall be held responsible for ensuring compliance with those requirements by all Subcontractors.

RM Consulted 2007 Revised 6-07



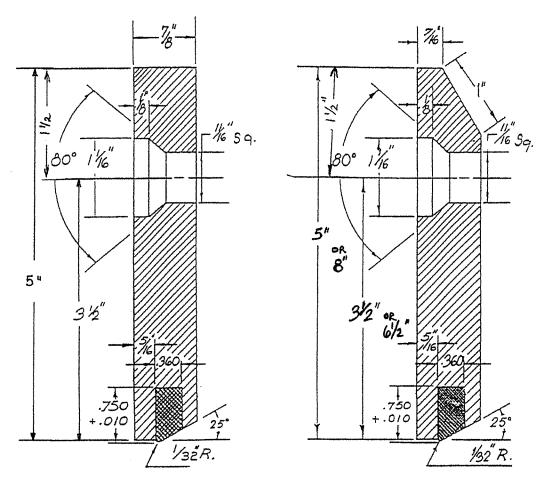
# NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

# PUNCHING SPACE SNOWPLOW CUTTING EDGES



**ATTACHMENT A** 

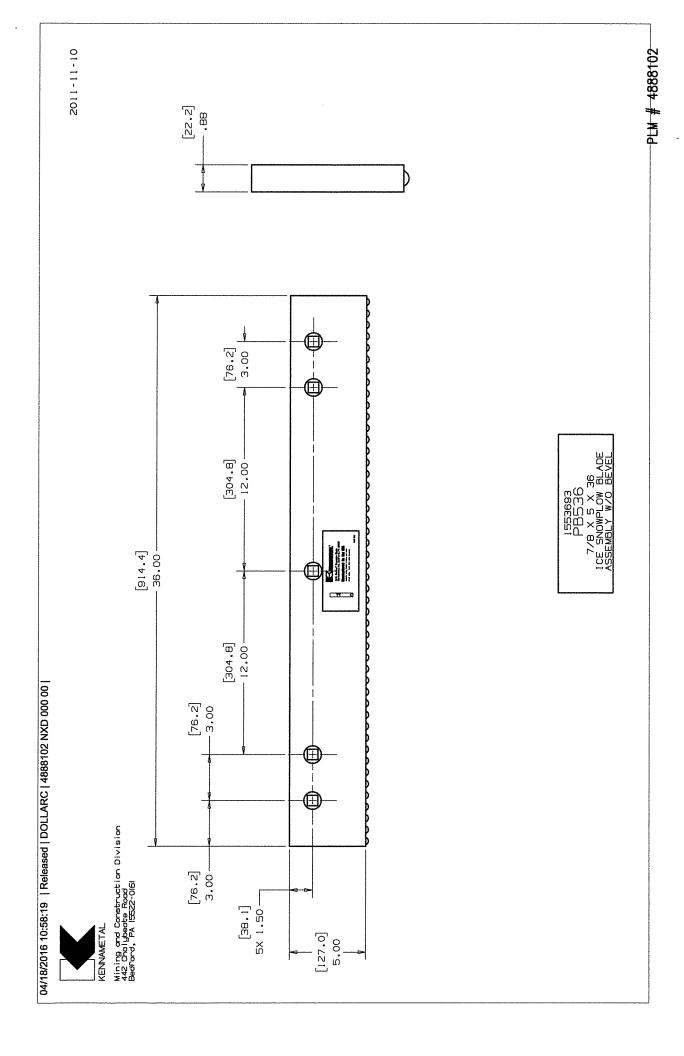
# **TUNGSTEN EDGES**



**SNOWPLOW** 

8"- MOTOR GRADER 5"- UNDERBODY

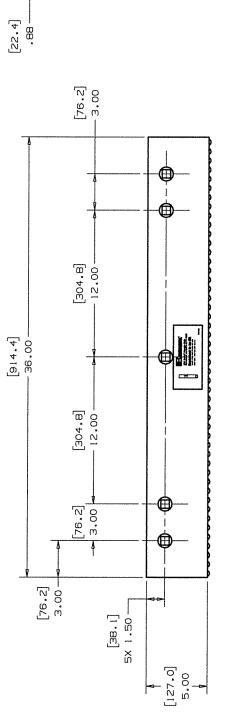
# **ATTACHMENT B**



09/22/2015 13:34:36 | Released | DOLLARC | 4888362 NXD 000 00 |



Mining and Construction Division 442 Chalybeate Road Bedford, PA 15522-0161



2035932 PB636 7/8 x 5 x 36 1.c.e GRADER PLOW BLADE ASSEMBLY

#### Amendment No. 1

To: ALL INTERESTED SUPPLIERS

From: North Dakota Department of Transportation

Date: August 1, 2016

Re: Amendment to Bid 760-06-16-050, CUTTING EDGES

Bidders Instruction #7 of the solicitation established a deadline for receipt of questions. The responses to these questions are provided as addenda to the solicitation. When necessary, the solicitation has been amended.

#### Question 1:

Reference Page 18 of this ITB titled:

"Sectional Tungsten Carbide Inserted snowplow cutting edges, 5" height, 5/8" hold-punching" Kennametal Isolated Carbide-Edge (I.C.E. Series)

The Kennametal material numbers for the PB536 and PB548 blades that you have listed are incorrect. Kennametal material number for the PB536 is 1553693, the PB548 is 1553694. These blades are manufactured with a square top edge.

Kennametal material number 2035932 is for the 3ft section with a beveled top edge. Kennametal material number 2035931 is for the 4ft section with a beveled top edge.

Would you please clarify which style you wish use to bid on?

#### Answer 1:

NDDOT does request both square and beveled top edge ICE blades. Replace page 18 of 19 of the bid document with page 2 of this amendment.

#### Question 2

Your attached drawing (attachment C) does not show a side view, so we are questioning whether you need these blades with a square top or a beveled top.

#### Answer 2:

Delete Attachment C of the bid document and replace with the attached 4 drawings.

Vendors are instructed to acknowledge receipt of and compliance with this amendment by signing below and returning this acknowledgement with your bid or proposal.

Any questions regarding this amendment must be submitted in writing to the undersigned Procurement Officer.

Vanessa Brosten, Procurement Officer

PHONE: 701-328-4466 FAX: 701-328-0310 E-MAIL: vbrosten@nd.gov

By my signature below, I hereby acknowledge receipt of and compliance with this amendment to the above referenced solicitation.

PRINTED NAME OF BIDDER OR OFFEROR and TITLE KUEDER MORTH AMELICA - GARDINER F. WILLIS	MAHASING PARTNER
SIGNATURE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DATE 8/8/2016
(	



**Kueper Plow Blade Specification** 

**TUCA SX Wave Snow Plow Cutting Edge** 

Presented by Kueper North America, LLC

2012



# **About this Specification**

© 2012 Kueper North America, LLC. All Rights Reserved. All other brands and names may be trademarks of their respective owners and are used for explanation without intent to infringe.



# 1. Description:

This specification covers snowplow blades with tungsten carbide inserts free floating in vulcanized rubber with the configuration of -STEEL-RUBBER-STEEL WITH CARBIDE INSERTS-RUBBER - STEEL.

The blades are manufactured by Kueper GmbH & Co. KG in Bochum, Germany

## 2. Materials:

# 2.1 Front Steel Plate:

Wear resistant steel with an average hardness of 400 HB, matching the wear and hardness specifications of Dillidur 400 V.

- i. Front Steel Plate thickness: 8 mm
- ii. Hardness: 400 HB (43 Rockwell C, 114 Rockwell B)
- iii. Tensile Strength: U.T.S. = 1300 MPa
- iv. Yield Point: Y.P. = 1000 MPa
- v. Tolerances according to specifications of Dillidur 400V.
- vi. Shape: Front plate to be formed in a "wave" shape in order to better deflect snow into the mold-board of the plow. Triangular openings as wear indicator.

# 2.2 Back Steel Plate:

Wear resistant steel with an average hardness of 400 HB matching the specifications of Dillidur 400V.

- vii. Back Steel Plate thickness: 8 mm
- viii. Hardness: 400 HB (43 Rockwell C, 114 Rockwell B) (tolerance ± 30 HB)
  - ix. Tensile Strength: U.T.S. = 1300 MPa
  - x. Yield Point: Y.P. = 1000 MPa
- xi. Tolerances according to specifications of Dillidur 400V.
- **2.3 Rubber:** The blade shall have a wear resistant rubber body, vulcanized between the two steel plates with tungsten carbide holders and inserts embedded within the rubber.

# 2.4 Tungsten Carbide Inserts:

- xii. Tungsten carbide inserts shall be centrically embedded on the lower end of a steel plate (=steel carbide holder).
- xiii. The inserts shall be a high shock WC Grade of tungsten and shall meet Virgin Tungsten Carbide quality specifications and the following requirements:
  - 1. Hardness: 1100-1300 HV10 ISO 3878
  - 2. Bending Strength: 2700 N/mm (squared) ISO 3327
  - 3. Average Grain Size: 5 7 μm
  - 4. Density: 14,40 g/cm³ ISO 3369
  - 5. Insert Dimensions:
    - a. Height: 17,5 mm



brazed flush with the bottom edge of the carbide holder. Each insert shall be max. two-inches nominal length.

7. The inserts shall be brazed on all contact surfaces consistent with sound brazing practice with no evidence of voids or use of shims. Brazing shall be of such strength and quality as required to prevent movement or loss of the inserts during use.

# 3. Finished Blades

<u>.</u>

- 3.1 Overall blade dimensions:
  - 1. Blade Thickness in wear area: 40 mm (tolerance ± 2mm)
  - 2. Overall Blade Height: 187 mm (tolerance ± 2mm)
- **3.2 Physical Requirements.** All blades shall be straight and free from flaws and injurious defects, and shall have workmanlike finish.
- 3.3 Tungsten carbide holders shall be placed free-floating in the rubber body. Thus there has to be a gap between two holders. In length carbide inserts should cover no less than 90% of the total length of the blade.
- 3.4 Punching shall be square or round holes. Details, location, and spacing of the holes shall be to customer requirements.
- 3.5 Blade punching will be of such accuracy, both for the spacing between holes and for the spacing between the end hole and the end of the blade, that the blades will fit the moldboards, thus making the blade sections interchangeable.
- 3.6 Blades shall be painted red/orange and any paint used to coat the blades shall be dry prior to shipment and shall not smear or track during handling.
- 3.7 Each blade element should provide the name of the manufacturer and a serial number for quality control.
- 3.8 Finished blade sections shall be provided in units of three (3) feet, four (4) feet, five (5) feet, or any other measure in length.
- 3.9 The finished blade section shall be fully assembled by the manufacturer and require no additional assembly, no additional parts or hardware, and no mounting hardware other than bolts and nuts.



Figure 1: Blade Dimensions

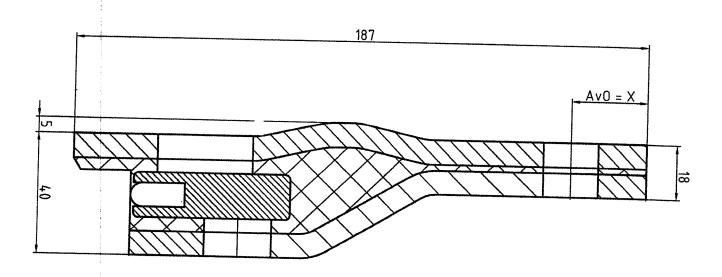
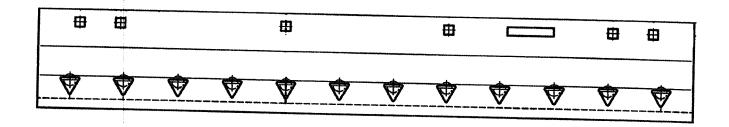


Figure 2: Hole Positioning (4')







Kueper Plow Blade Specification

TUCA SX Underbody Scraper Cutting Edge

Presented by Kueper North America, LLC

2013

# **About this Specification** © 2012 Kueper North America, LLC. All Rights Reserved. All other brands and names may be trademarks of their respective owners and are used for explanation without intent to infringe.

### 1. Description:

This specification covers snow plow blades for underbody plows with carbide inserts free floating in vulcanized rubber with the configuration of STEEL-RUBBER-CARBIDE-RUBBER-STEEL.

The blades are manufactured by Kueper GmbH & Co. KG in Bochum, Germany

### 2. Materials

- 2.1.1 Front Steel Plate: Wear resistant steel with an average hardness of 400HB
- 2.1.2 Plate thickness of 8mm
- 2.1.3 Hardness: 400HB (43 Rockwell C, 114 Rockwell B)
- 2.1.4 Tensile Strength: U.T.S. = 1300 MPa
- 2.1.5 Yield Point: Y.P. = 1000 MPa
- 2.1.6 Tolerances according to specification of Dillidur 400V
- 2.1.7 Triangular openings as wear indicator
- **2.2.1** Back Steel Plate: Wear resistant steel with an average hardness of 400HB
- 2.2.2 Plate thickness of 6mm
- 2.2.3 Hardness: 400HB (43 Rockwell C, 114 Rockwell B)
- 2.2.4 Tensile Strength: U.T.S. = 1300 MPa
- 2.2.5 Yield Point: Y.P. = 1000 MPa
- 2.2.6 Tolerances according to specification of Dillidur 400V
- **2.3.1** Rubber: The blade shall have a wear resistant rubber body, vulcanized between two steel plates with tungsten carbide holders inserts embedded within the rubber.

## 2.4.1 Tungsten Carbide inserts:

2.4.2 Tungsten carbide inserts shall be centrically embedded on the lower end of a steel plate (= steel carbide holder)

- 2.4.3 The inserts shall be high schock EC Grade of tungsten and shall meet Virgin Tungsten Carbide quality specifications and the following requirements
- 2.4.4 Hardness: 1100-1300 HV10 ISO 3878
- 2.4.5 Bending Strenght: 2700 N7mm (squared) ISO 3327
- **2.4.6** Average Grain Size:  $5-7 \mu m$
- 2.4.7 Inserts Dimension: a. Height 17,5mm b. Width 8mm
- 2.4.8 The groove for the carbide shall be milled in the center of the Steel carbide holder. The grove shall be milled to a depth that will allow the inserts to be brazed flush with the bottom edge of the carbide holder.
- 2.4.9 The inserts shall be brazed on all contact surfaces consistent with sound brazing practice with no evidence of voids or use of shims. Brazing shall be of such strength and quality as required to prevent movement or loss of the inserts during use.

### 3. Finished Blades

- 3.1.1 Overall blade dimensions:
- **3.1.2** Overall blade height 125mm (tolerance ± 2mm)
- **3.1.3** Overall blade thickness 36mm (tolerance ± 2mm)
- 3.1.4 Overall blade length according to customer and plow requirements
- **3.1.5** The hole position and design must be according to customer and plow requirements

# 4. Physical Requirements

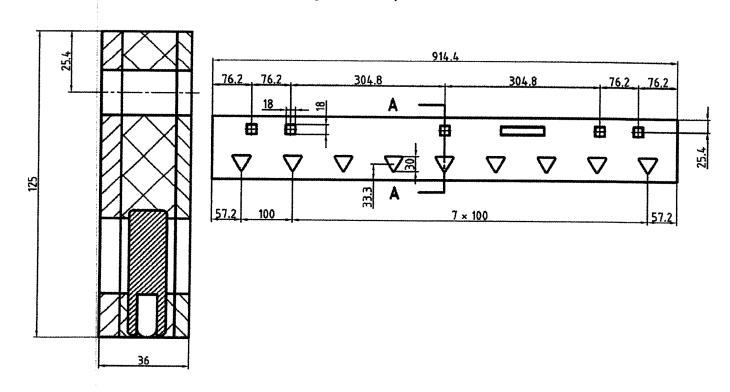
- **4.1.1** All blades shall be straight and free from flaws and injurious defects, and shall have workmanlike finish.
- **4.2.1** Tungsten carbide holders shall be placed free-floating in the rubber body. Thus there has to be a gap between two holders in order for the holders to act independently of one another and "flex". In length carbide inserts should cover no less than 90% of the total length of the blade.

- **4.3.1** Punching shall be square or round holes. Details, location, and spacing of the holes shall be to customer requirements.
- **4.4.1** Blade punching will be of such accuracy, both for the spacing between holes and for the spacing between the end hole and the end of the blade, that the blades will fit the moldboards, thus making the blade sections interchangeable.
- **4.5.1** Blades shall be painted red/orange and any paint used to coat the blades shall be dry prior to shipment and shall not smear or track during handling.
- **4.6.1** Each blade element should provide the name of the manufacturer and a serial number for quality control.
- **4.7.1** Finished blade sections shall be provided in units of three (3) feet, four (4) feet, five (5) feet, or any other measure in length.
- **4.8.1** The finished blade section shall be fully assembled by the manufacturer and require no additional assembly, no additional parts or hardware, and no mounting hardware other than bolts and nuts

### 5. Drawing

**5.1.1** The drawing displays only the blade measurements in mm, the inlay design and possitions are are only for presentation purposes.

TUCA SX Underbody 3' example

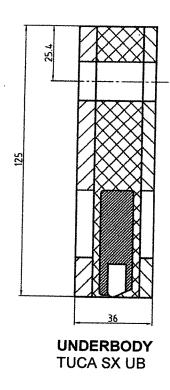


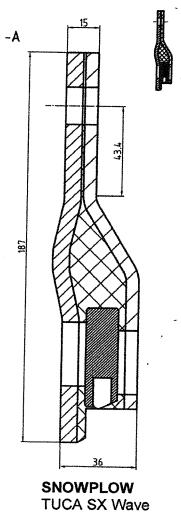


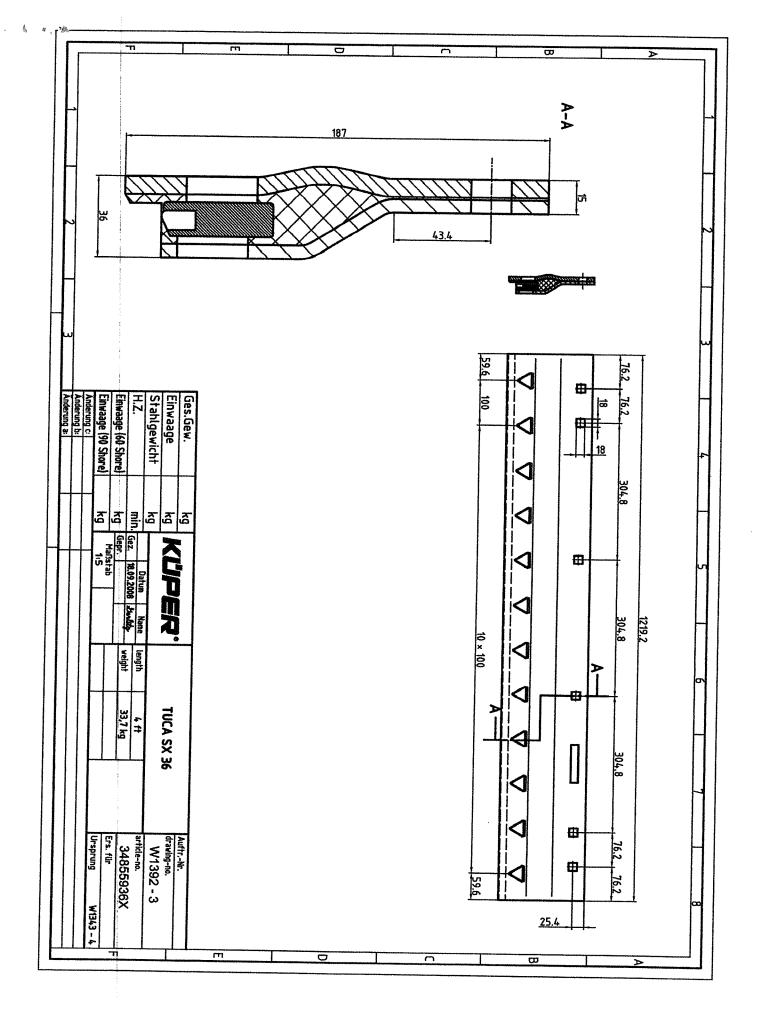
NDDOT P/N	KUEPER P/N	BLADE	LENGTH (ft)	LENGTH (#) DESCRIPTION
76006-369155	34A56736XB7	TUCA SX Wave	3 ft	Tungsten Carbide/Steel vulcanized in rubber snowplow cutting edge
76006-369177	34A56636XB7	TUCA SX Wave	4 ft	Tungsten Carbide/Steel vulcanized in rubber snowplow cutting edge
	3485583TX	TUCA SX UB	3 ft	Tungsten Carbide/Steel vulcanized in rubber underbody scraper cutting edge
	3485593TX	TUCA SX UB	4 ft	Tungsten Carbide/Steel vulcanized in rubber underbody scraper cutting edge
	3485603TX	TUCA SX UB	5 ft	Tungsten Carbide/Steel vulcanized in rubber underbody scraper cutting edge
	3485653TX	TUCA SX UB	6 ft	Tungsten Carbide/Steel vulcanized in rubber underhody scraper cutting edge

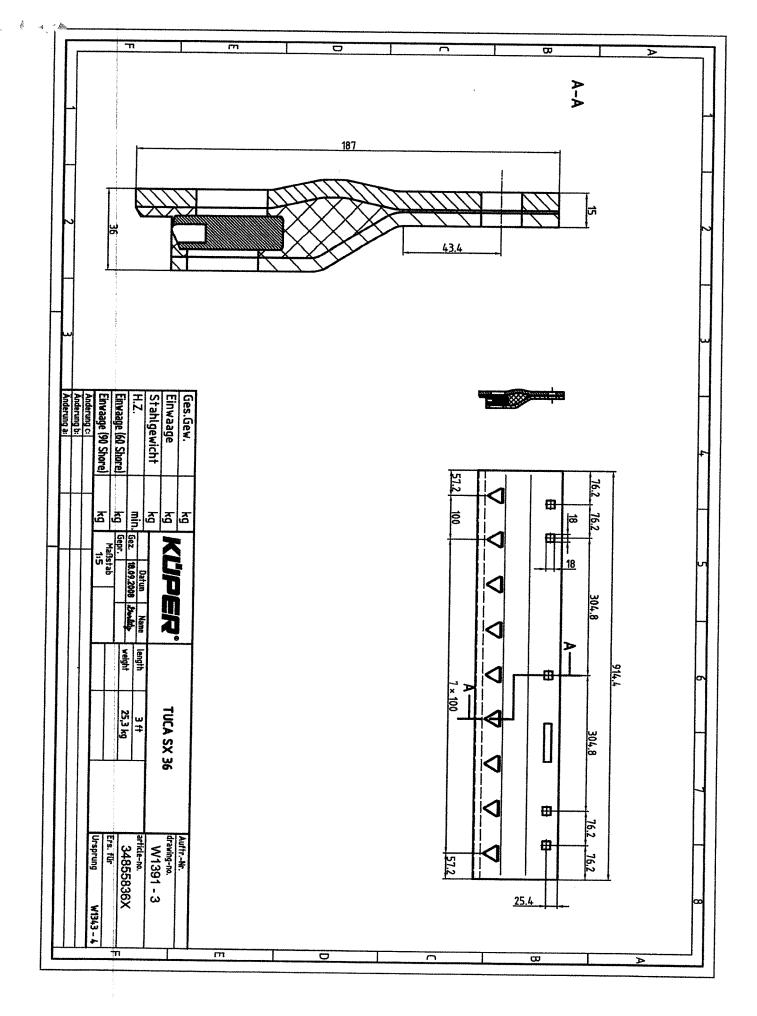
# **KUEPER**

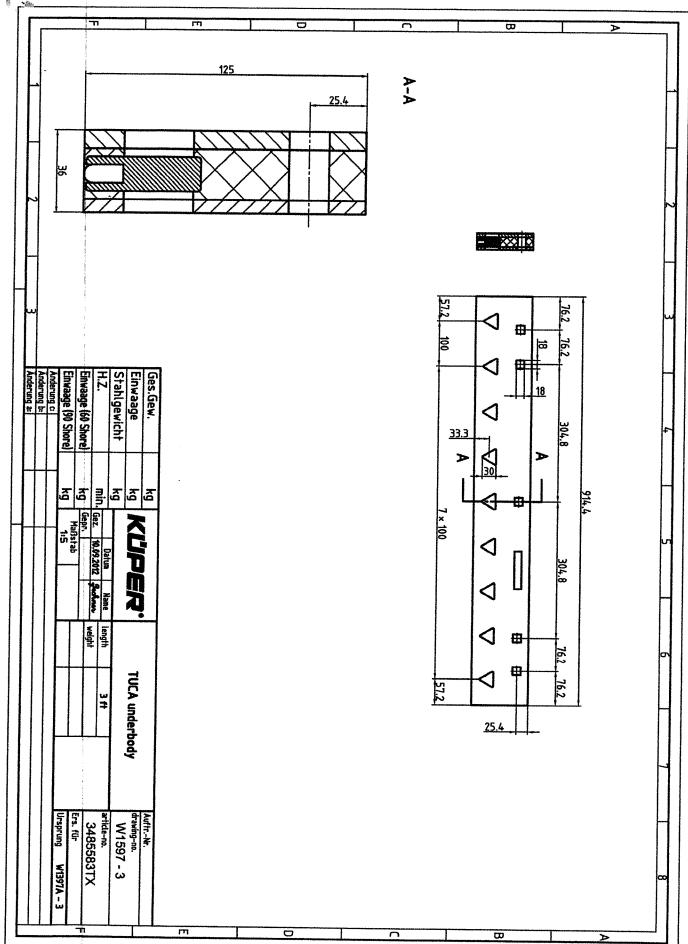
Tungsten Carbide/Steel vulcanized in rubber cutting edges



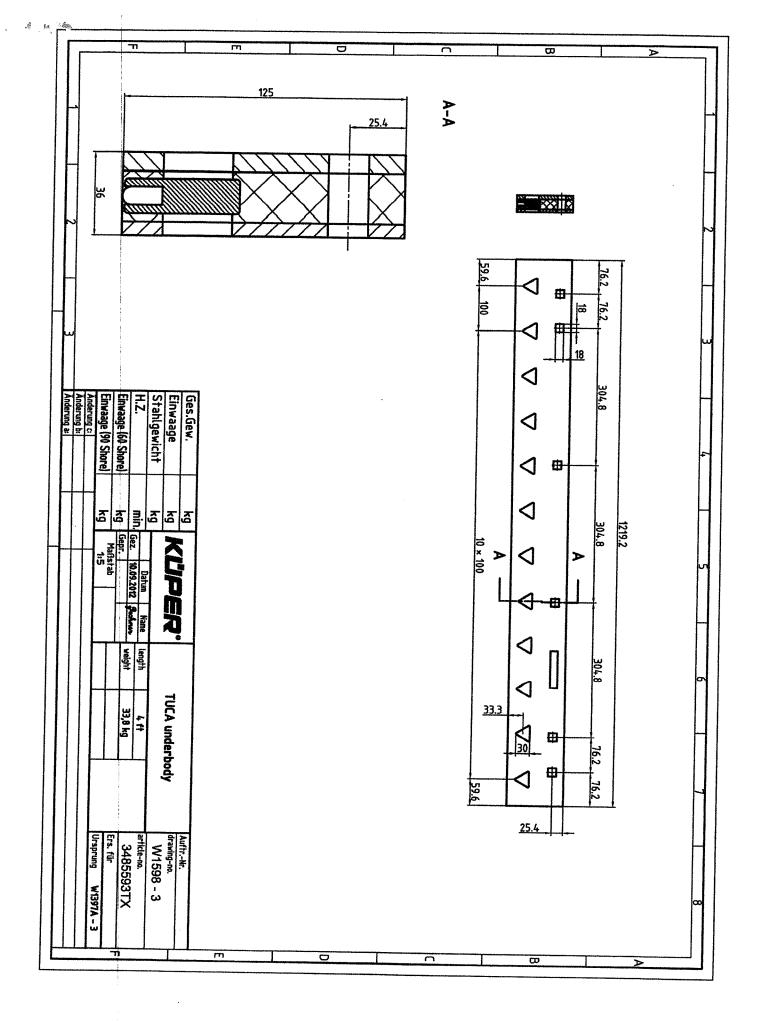


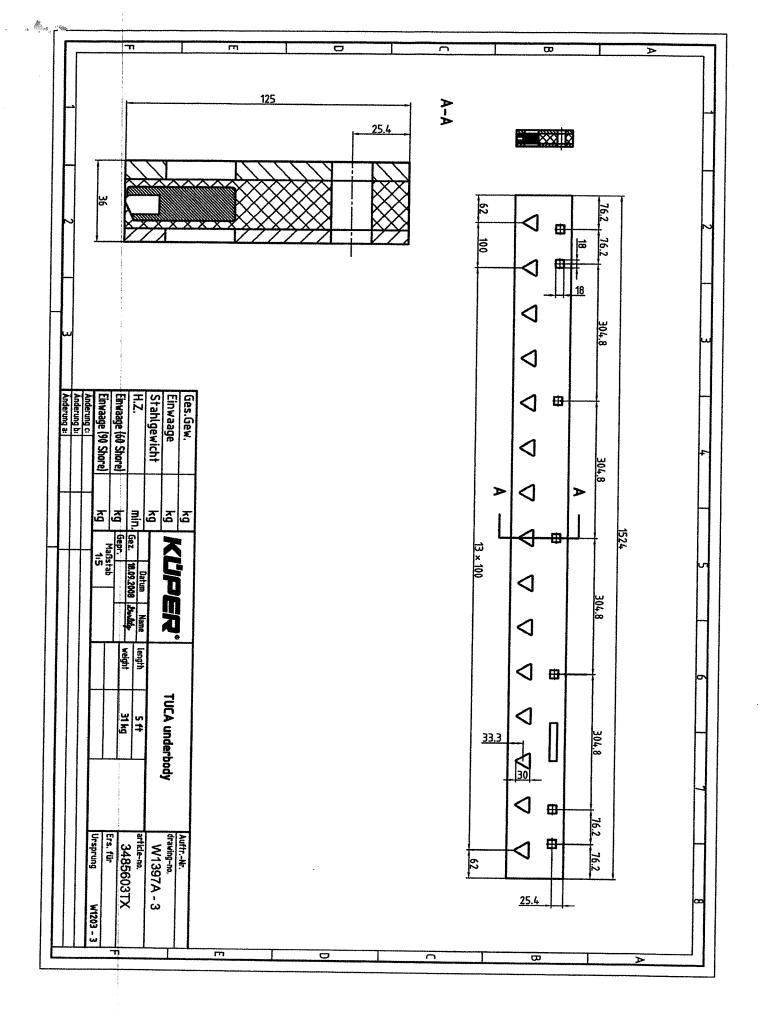






4 6





# North Dakota Department of Transportation AMENDMENT TO CONTRACT NO. 50161772 Project No.

THIS AMENDMENT to the above-referenced contract is entered into by and between the State of North Dakota, acting through its Director of Transportation, hereinafter known as NDDOT, whose address is 608 East Boulevard Avenue, Bismarck, North Dakota 58505-0700, and Kueper North America, hereinafter known as the Contractor, whose address is 171 Church St. Suite 300, Charleston, South Carolina, 29401.

WHEREAS, the parties entered into a contract on September 2, 2016; and

WHEREAS, the contract was competitively bid and awarded to the Contractor; and

WHEREAS, the Contractor has performed satisfactorily under the terms of the contract; and

WHEREAS, the Contractor has expressed a willingness to extend the term of the above-referenced contract for an additional twelve (12) months; and

NOW THEREFORE, the Contractor and NDDOT agree that the term of the contract is extended through July 31, 2018.



All other terms and conditions of the above-referenced contract are incorporated herein by reference and remain in full force and effect.

EXECUTED the date last below signed.

WITNESS:	CONTRACTOR:
PATRICIA SCHUSTER	KUEPER NORTH AMERICA
NAME (TYPE OR PRINT)	GARDINER E-WILLIS
SIGNATURE	OFFICER'S NAME (TYPE OR PRINT)
To be signed by Owner; Partner; Corp. Pres., Vice Pres., or other authorized Corp. Officer. (If signed by other authorized Corp. Officer, please attach copy	MANAGING PARTAER
of Power of Attorney or other documentation showing authority to sign.)	(6/27/17
	DATE
WITNESS:	NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
Sondra Goelsel	Ronald J. Henke
NAME (TYPEOR PRINT) Loudin Halbel	DIRECTOR (TYPE OB PRINT)
SIGNATURE	7/26/17
	APPROVED as to substance by:
	BAJ DECIDIVISION DIRECTOR (TYPE OR PRINT)
	beng
	7 - 26-17
	DATE

CLA 52494 (Div. 06) L.D. Approved 5-19-00; 5-03



APPROVED as to execution this

2b day of JUIY 20 17

ATTORNEY GENERAL

By SPECIAL ASST. ATTORNEY GENERAL