



**DANE COUNTY**  
**DEPARTMENT OF ADMINISTRATION**  
**PURCHASING DIVISION**

**REQUEST FOR BID (RFB)**

Revised 05/2021 (S)(LVP)

**BID NUMBER:**

**122045**

**BID TITLE:**

**State Bridge Polymer  
Overlay Services**

**BID DEADLINE:**

**May 27, 2022  
2:00 p.m. (CST)**

**SUBMIT BID TO:**

**Purchasing Bid Dropbox**  
[www.danepurchasing.com](http://www.danepurchasing.com)

**\*Late, faxed, mailed, hand-delivered or unsigned bids will be rejected\***

**DIRECT  
ALL INQUIRES  
TO:**

**Carmen Hidalgo**  
Purchasing Officer  
(608)266-4966  
[Hidalgo.Carmen@countyofdane.com](mailto:Hidalgo.Carmen@countyofdane.com)  
[www.danepurchasing.com](http://www.danepurchasing.com)

**BID SUBMISSION CHECKLIST**

- Update Vendor Registration
- Read Entire Bid Document

**Completed Bid Packet (In PDF Format)**

- Section 1 – Vendor Information
- Section 2 – Bid Specifications
- Section 3 – Price Proposal

- Upload Bid Response to Purchasing Bid Dropbox

**DATE ISSUED**

May 9, 2022

**VENDOR INFORMATION**

**VENDOR NAME:** \_\_\_\_\_

<b>Vendor Information (address below will be used to confirm Local Vendor Preference)</b>			
<b>Address</b>			
<b>City</b>		<b>County</b>	
<b>State</b>		<b>Zip+4</b>	
<b>Vendor Rep. Name</b>		<b>Telephone</b>	
<b>Title</b>			
<b>Email</b>			
<b>Dane County Vendor #</b>			

<b>Local Vendor Preference</b> <i>(Reference General Guidelines #1.6)</i>
<input type="checkbox"/> <b>Locally Based &amp; Owned Vendor</b>
<input type="checkbox"/> <b>Locally Operated Vendor</b>
<input type="checkbox"/> <b>Non-Locally Operated Vendor</b>
<input type="checkbox"/> <b>No Local Vendor Preference</b>

<b>Local Content Vendor Preference</b> <b>Does Not Apply To This Bid</b> <i>(Reference General Guidelines #1.7)</i>
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<b>Cooperative Purchasing (Reference General Guidelines #1.8)</b>
<input type="checkbox"/> I agree to furnish the commodities or services of this bid to municipalities and state agencies.
<input type="checkbox"/> I do not agree to furnish the commodities or services of this bid to municipalities and state agencies.

<b>Fair Labor Practice Certification (Reference General Guidelines #1.9)</b>
<input type="checkbox"/> Vendor has not been found by the National Labor Relations Board (“NLRB”) or the Wisconsin Employment Relations Commission (“WERC”) to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the date this bid submission is signed.
<input type="checkbox"/> Vendor has been found by the National Labor Relations Board (“NLRB”) or the Wisconsin Employment Relations Commission (“WERC”) to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the date this bid submission is signed.

<b>Addenda – we hereby acknowledge receipt, review and use of the following addenda, if applicable.</b>				
<input type="checkbox"/> Addendum #1	<input type="checkbox"/> Addendum #2	<input type="checkbox"/> Addendum #3	<input type="checkbox"/> Addendum #4	<input type="checkbox"/> None

<b>Signature Affidavit</b>
<p>In signing this bid, we certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a bid; that this bid has been independently arrived at without collusion with any other bidder, competitor or potential competitor; that this bid has not been knowingly disclosed prior to the opening of bids to any other bidder or competitor; that the above statement is accurate under penalty of perjury.</p> <p>The undersigned, submitting this bid, hereby agrees with all the terms, conditions, and specifications required by the County in this Request for Bid, and declares that the attached bid and pricing are in conformity therewith.</p>

**Signature:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Printed Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**BID AND SPECIFICATION OVERVIEW**

Dane County as represented by the Purchasing Division will accept bids for the purchase of specified item(s) as described within this document.

**Specification Compliance:** Bidder shall complete every space in the area provided with either a check mark to indicate the item being bid is exactly as specified (**Yes**), or deviates from bid specification (**No**). Any deviation from the minimum specifications stated herein must be identified in detail in the Specifications Deviations section of the bid and must include a description of how the proposed item(s) differ from the bid requirements, along with detailed justification for such deviation. Bidder shall include photos and schematics as necessary, for complete clarification.

The specifications below describe an acceptable product. Minor variations in specification may be accepted if, in the opinion of County staff, they do not adversely affect the quality, maintenance or performance of the item(s). Dane County reserves the right to accept or reject any and all bids, to waive informalities and to choose the bid that best meets the specifications and needs of the County.

**Term:** The contract shall be effective on the date indicated on the Dane County purchase order or the Dane County contract execution date and shall run for one year from that date.

## BID SPECIFICATIONS

### 122045 – State Bridge Polymer Overlay Services

**GENERAL**

You are invited to submit a bid to provide State Bridge Polymer Overlay Services on Bridge B-13-0311 CTH BW (W. Broadway) over US 12/18 Beltline Highway for Wisconsin Department of Transportation. This project is being let on their behalf by the Dane County Highway Department.

All materials supplied under this proposal shall conform to the Standard Specifications for Road and Bridge Construction, 2022 edition (hereinafter referred to as the "Standard Specifications"), and all subsequent revisions and supplementary specifications, of the Wisconsin Division of Highways, Department of Transportation.

The special provisions in this proposal shall supplement and take precedence over the Standard Specifications.

Your failure to submit a bid may prevent Dane County Highway and Transportation Department from acquiring your product(s). Thus, if you are interested in doing business with the Dane County Highway and Transportation Department in 2022, we strongly encourage you to submit a bid by the opening date indicated.

**TRAFFIC CONTROL & WORK HOURS**

Dane County Highway will provide traffic control in conjunction with their CTH BW (Broadway) reconstruction project. In Stage 1 (approximately May – end of June 2022), the inner 2 lanes in each direction will be closed, creating a work zone. In Stage 2, (approximately July 2022) the outer lanes will be closed, creating a work zone. The Contractor will need to coordinate schedule with Dane Co. Highway. See Attachment 1 for Traffic Control Plan.

#	DESCRIPTION	Spec Compliance	
<b>1</b>	<b>INSURANCE</b>		
<b>2</b>	Bidders shall carry insurance as required in the Standard Terms and Conditions, Section 20.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>3</b>	The bidder shall furnish Dane County Highway and Transportation Department <b>along with the bid</b> a certificate of insurance showing the type, amount, class of operations covered, effective dates, and expiration dates of policies.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>4</b>	<b>BID BOND/PERFORMANCE BOND</b>		
<b>5</b>	Each proposal must be accompanied by a certified or cashier's check payable to the Dane County Public Works, Highway & Transportation Department, or a bid bond, as a guarantee in the amount of 5% of the total bid.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>6</b>	Successful bidders shall furnish the County with a performance bond equal to 100% of the contracted amount (per State Statute 779.14).	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>7</b>	<b>NOTICE TO BEGIN WORK</b>		
<b>8</b>	The contractor is required to begin work within ten calendar days after official notice from the County.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>9</b>	Liquidated damages of \$200 per weekday will be assessed for any delay after this notification to begin.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>10</b>	The contractor will notify the County <b>48 hours</b> in advance of beginning the project in order for the County to provide an inspector.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>11</b>	An inspector may not be furnished if notice of starting work by the contractor is not given to the County prior to 3:00 p.m. of the preceding day for projects starting on Tuesday thru Friday, or prior to 3:00 p.m. on Friday for projects starting on Saturday thru Monday.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>12</b>	Failure to notify the County could result in non-payment for that part of the work that is completed when an inspector is absent	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>13</b>	<b>GENERAL - POLYMER OVERLAY, ITEM 509.5100.S</b>		
		<b>Spec Compliance</b>	

**Section 2 – Bid Specifications – Submit with Bid**

<b>14</b>	This special provision describes providing two layers of a two-component polymer overlay system to the bridge deck for Bridge 13-0311 CTH BW (W. Broadway) over US 12/18 Beltline Highway.	<input type="checkbox"/> YES	<input type="checkbox"/> NO																								
<b>15</b>	<b>MATERIALS</b>	<b>Spec Compliance</b>																									
<b>16</b>	Furnish materials specifically designed for use over concrete bridge decks. Furnish polymer liquid binders from the department's approved product list.	<input type="checkbox"/> YES	<input type="checkbox"/> NO																								
<b>17</b>	<b>POLYMER RESIN</b>	<b>Spec Compliance</b>																									
<b>18</b>	<p>Furnish a polymer resin base and hardener composed of two-component, 100 percent solids, 100 percent reactive, thermosetting compound with the following properties:</p> <table border="1"> <thead> <tr> <th>Property</th> <th>Requirements</th> <th>Test Method</th> </tr> </thead> <tbody> <tr> <td>Gel Time<sup>[1]</sup></td> <td>15 - 45 minutes @ 73° to 75° F</td> <td>ASTM C881</td> </tr> <tr> <td>Viscosity<sup>[1]</sup></td> <td>7 - 70 poises</td> <td>ASTM D2393, Brookfield RVT, Spindle No. 3, 20 rpm</td> </tr> <tr> <td>Shore D Hardness<sup>[2]</sup></td> <td>60-75</td> <td>ASTM D2240</td> </tr> <tr> <td>Absorption<sup>[2]</sup></td> <td>1% maximum at 24 hr</td> <td>ASTM D570</td> </tr> <tr> <td>Tensile Elongation<sup>[2]</sup></td> <td>30% - 70% @ 7 days</td> <td>ASTM D638</td> </tr> <tr> <td>Tensile Strength<sup>[2]</sup></td> <td>2000 to 5000 psi @ 7 days</td> <td>ASTM D638</td> </tr> <tr> <td>Chloride Permeability<sup>[2]</sup> J</td> <td>&lt;100 coulombs @ 28 days</td> <td>AASHTO T277</td> </tr> </tbody> </table> <p><sup>[1]</sup>Uncured, mixed polymer binder <sup>[2]</sup>Cured, mixed polymer binder</p>	Property	Requirements	Test Method	Gel Time <sup>[1]</sup>	15 - 45 minutes @ 73° to 75° F	ASTM C881	Viscosity <sup>[1]</sup>	7 - 70 poises	ASTM D2393, Brookfield RVT, Spindle No. 3, 20 rpm	Shore D Hardness <sup>[2]</sup>	60-75	ASTM D2240	Absorption <sup>[2]</sup>	1% maximum at 24 hr	ASTM D570	Tensile Elongation <sup>[2]</sup>	30% - 70% @ 7 days	ASTM D638	Tensile Strength <sup>[2]</sup>	2000 to 5000 psi @ 7 days	ASTM D638	Chloride Permeability <sup>[2]</sup> J	<100 coulombs @ 28 days	AASHTO T277	<input type="checkbox"/> YES	<input type="checkbox"/> NO
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Chloride Permeability <sup>[2]</sup> J	<100 coulombs @ 28 days	AASHTO T277																									
<b>19</b>	<p>Ensure that the polymer resin when mixed with aggregate has the following properties:</p> <table border="1"> <thead> <tr> <th>Property</th> <th>Requirement<sup>[1]</sup></th> <th>Test Method</th> </tr> </thead> <tbody> <tr> <td>Minimum Compressive Strength</td> <td>1,000 psi @ 8 hrs 5,000 psi @ 24 hrs</td> <td>ASTM C579 Method B, Modified<sup>[2]</sup></td> </tr> <tr> <td>Thermal Compatibility</td> <td>No Delaminations</td> <td>ASTM C884</td> </tr> <tr> <td>Minimum Pull-off Strength</td> <td>250 psi @ 24 hrs</td> <td>ASTM C1583</td> </tr> </tbody> </table> <p><sup>[1]</sup> Based on samples cured or aged and tested at 75°F <sup>[2]</sup> Plastic inserts that will provide 2-inch by 2-inch cubes shall be placed in the oversized brass molds.</p>	Property	Requirement <sup>[1]</sup>	Test Method	Minimum Compressive Strength	1,000 psi @ 8 hrs 5,000 psi @ 24 hrs	ASTM C579 Method B, Modified <sup>[2]</sup>	Thermal Compatibility	No Delaminations	ASTM C884	Minimum Pull-off Strength	250 psi @ 24 hrs	ASTM C1583	<input type="checkbox"/> YES	<input type="checkbox"/> NO												
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<b>20</b>	<b>AGGREGATES</b>	<b>Spec Compliance</b>																									
<b>21</b>	<p>Furnish natural or synthetic aggregate that is non-polishing; clean; free of surface moisture; fractured or angular in shape; free from silt, clay, asphalt, or other organic materials; and conforms to the following:</p> <p align="center"><b>Aggregate Properties</b></p> <table border="1"> <thead> <tr> <th>Property</th> <th>Requirement</th> <th>Test Method</th> </tr> </thead> <tbody> <tr> <td>Moisture Content<sup>[1]</sup></td> <td>1/2 of the measured aggregate absorption, %</td> <td>ASTM C566</td> </tr> <tr> <td>Hardness</td> <td>≥6.5</td> <td>Mohs Scale</td> </tr> </tbody> </table>	Property	Requirement	Test Method	Moisture Content <sup>[1]</sup>	1/2 of the measured aggregate absorption, %	ASTM C566	Hardness	≥6.5	Mohs Scale	<input type="checkbox"/> YES	<input type="checkbox"/> NO															
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**Section 2 – Bid Specifications – Submit with Bid**

	Fractured Faces	100% with at least 1 fractured face & 80% with at least 2 fractured faces of material retained on No.16	ASTM D5821		
	Absorption	≤1%	ASTM C128		
	[1] Sampled and tested by the department before placement.				
	<b>Gradation</b>				
	Sieve Size		% Passing by Weight		
	No. 4		100		
	No. 8		30 – 75		
	No. 16		0 – 5		
	No. 30		0 – 1		
<b>22</b>	<b>APPROVAL OF BRIDGE DECK POLYMER OVERLAY SYSTEM</b>			<b>Spec Compliance</b>	
<b>23</b>	A minimum of 20 working days before application, submit product data sheets and specifications from the manufacturer, and a certified report of test or analysis from an independent laboratory to the engineer for approval.			<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>24</b>	The department will sample and test the aggregates for gradation and moisture content before placement. If requested, supply the department with samples of the polymer for the purpose of acceptance testing.			<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>25</b>	<b>PRODUCT DATA SHEETS AND SPECIFICATIONS</b>			<b>Spec Compliance</b>	
<b>26</b>	Product data sheets and specifications from the manufacture consists of literature from the manufacturer showing general instructions, application recommendations/methods, product properties, general instructions, or any other applicable information will be provided to the County			<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>27</b>	<b>CERTIFIED REPORT OF TEST OR ANALYSIS</b>			<b>Spec Compliance</b>	
<b>28</b>	<p>Conform to the following:</p> <p><u>Polymer Binder:</u> Submit a certified report of test or analysis from an independent laboratory dated less than 3 years before the date of the project letting showing the polymer binder meets the requirements of section B.2.</p> <p><u>Aggregates:</u> Submit a certified report of test or analysis from an independent laboratory dated less than 6 months before the date of the project letting showing the aggregates meet the requirements of section B.3.</p>			<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>29</b>	<b>CONSTRUCTION - GENERAL</b>			<b>Spec Compliance</b>	
<b>30</b>	Ensure that the overlay system is 1/4 inch thick or thicker.			<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>31</b>	<p>Conform to the following:</p> <p><u>Field Review:</u> Conduct a field review of the existing deck to identify any possible surface preparation and material compatibility issues.</p> <p><u>Pre-Installation Meeting:</u> Conduct a pre-installation meeting with the manufacturer's representative and the engineer before construction. Discuss the field review findings, verification testing of the surface</p>			<input type="checkbox"/> YES	<input type="checkbox"/> NO

**Section 2 – Bid Specifications – Submit with Bid**

	<p>preparation and establish procedures for maintaining optimum working conditions and coordination of work. Furnish the engineer a copy of the recommended procedures and apply the overlay system according to the manufacturer's instructions. Supply for the engineer's use for the duration of the project, a Concrete Surface Profile (CSP) chip set of 10 from the International Concrete Repair Institute (ICRI).</p> <p><u>Manufacturer's Representative:</u> An experienced manufacturer's representative familiar with the overlay system installation procedures shall be present at all times during surface preparation and overlay placement to provide quality assurance that the work is being performed properly. This requirement may be reduced at the engineer's discretion.</p> <p><u>Material Storage:</u> Store and handle materials according to the manufacturer's recommendations. Store resin materials in their original containers in a dry area. Store all aggregates in a dry environment and protect aggregates from contaminants on the job site.</p>		
<b>32</b>	<b>DECK PREPARATION - DECK REPAIR</b>	<b>Spec Compliance</b>	
<b>33</b>	Remove all asphaltic patches and unsound or disintegrated areas of the concrete decks as the plans show, or as the engineer directs.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>34</b>	Work performed to remove and repair the concrete deck will be paid for under other items.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>35</b>	Use deck patching products that are compatible with the overlay system. Patching materials with magnesium phosphate shall not be used. Place patches after surface is prepared via shot blasting and cleaning as described in Section C.2.2 of this specification	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>36</b>	Portland cement concrete patches shall be used for joint repairs and full depth deck repairs with a plan area larger than 4 sf, unless approved otherwise by the Structures Design Section	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>37</b>	If rapid-set concrete is used, place patches per the manufacturer's recommendation. If Portland cement concrete is used, place patches per standard spec 509.3.9.1.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>38</b>	Deck patching shall be filled and properly finished prior to overlay placement.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>39</b>	Do not place overlay less than 1 hour, or per the manufacturer's recommendation, after placing rapid-set concrete patches in the repair areas.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>40</b>	Do not place overlay less than 28 days after placing Portland cement concrete patches in the repair areas.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>41</b>	<b>DECK PREPARATION - SURFACE PREPARATION</b>	<b>Spec Compliance</b>	
<b>42</b>	Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface profile meeting CSP 5 (medium-heavy shotblast) according to the ICRI Technical Guideline No. 310.2.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>43</b>	If the engineer requires additional verification of the surface preparation, test the tensile bond strength according to ASTM C1593.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>44</b>	The surface preparation will be considered acceptable if the tensile bond strength is greater than or equal to 250 psi or the failure area at a depth of 1/4 inches or more is greater than 50 percent of the test area.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>45</b>	Continue adjustment of the shotblasting machine and necessary testing until the surface is acceptable to the engineer or a passing test result is obtained.	<input type="checkbox"/> YES	<input type="checkbox"/> NO

**Section 2 – Bid Specifications – Submit with Bid**

<b>46</b>	Prepare the entire deck using the final accepted adjustments to the shotblasting machine as determined above.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>47</b>	Thoroughly blast clean with hand-held equipment any areas inaccessible by the shotblasting equipment. Do not perform surface preparation more than 24 hours before the application of the overlay system.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>48</b>	Protect drains, expansion joints, access hatches, or other appurtenances on the deck from damage by the shot and sand blasting operations and from materials adhering and entering.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>49</b>	Tape or form all construction joints to provide a clean straight edge.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>50</b>	Before shot blasting, remove pavement markings within the treatment area using an approved mechanical or blasting method.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>51</b>	Prepare the vertical concrete surfaces adjacent to the deck a minimum of 2" above the overlay according to SSPC-SP 13 (free of contaminants, dust, and loose concrete) by sand blasting, using wire wheels, or other approved method.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>52</b>	Just before overlay placement, clean all dust, debris, and concrete fines from the prepared surfaces including the vertical surfaces with compressed air. When using compressed air, the air stream must be free of oil.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>53</b>	Any grease, oil, or other foreign matter that rests on or has absorbed into the concrete shall be removed completely.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>54</b>	If prepared surfaces (including the first layer of the polymer overlay) are exposed to rain or dew, lightly sandblast (brush/breeze blast) the exposed surfaces.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>55</b>	The engineer may consider alternate surface preparation methods per the overlay system manufacture's recommendations.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>56</b>	The engineer will approve the final surface profile and deck cleanliness before the contractor placing the polymer overlay.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>57</b>	<b>TRANSITIONAL AREA</b>	<b>Spec Compliance</b>	
<b>58</b>	See Attachment 2 for detail on transition from deck to approach slab/pavement.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>59</b>	<b>OVERLAY APPLICATION</b>	<b>Spec Compliance</b>	
<b>60</b>	Perform the handling and mixing of the polymer resin and hardening agent in a safe manner to achieve the desired results according to the manufacturer's instructions.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>61</b>	Do not apply the overlay system if any of the following exists: <ul style="list-style-type: none"> <li>1. Ambient air temperature is below 50 F or above 100 F.</li> <li>2. Deck temperature is below 50 F.</li> <li>3. Moisture content in the deck exceeds 4.5 percent when measured by an electronic moisture meter or shows visible moisture after 2 hours when measured in accordance with ASTM D4263.</li> <li>4. Rain is forecasted during the minimum curing periods listed under C.5.</li> <li>5. Materials component temperatures below 65 F or above 99 F.</li> <li>6. Concrete deck age is less than 28 days.</li> <li>7. The deck temperature exceeds 100 F.</li> <li>8. If the gel time is 10 minutes or less at the predicted high air temperature for the day.</li> </ul>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>62</b>	After the deck has been shotblasted or during the overlay curing period, only necessary surface preparation and overlay application equipment will be allowed on the deck.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>63</b>	Provide appropriate protective measures to prevent contamination from equipment allowed on the deck during preparation and application operations. Begin overlay placement as soon as possible after surface preparation operations.	<input type="checkbox"/> YES	<input type="checkbox"/> NO



**Section 2 – Bid Specifications – Submit with Bid**

<b>64</b>	The polymer overlay shall consist of a two-course application of polymer and aggregate. Each of the two courses shall consist of a layer of polymer covered with a layer of aggregate in sufficient quantity to completely cover the polymer.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>65</b>	Apply the polymer and aggregate according to the manufacturer's requirements. Apply the overlay using equipment designed for this purpose. The application machine shall feature positive displacement volumetric metering and be capable of storing and mixing the polymer resins at the proper mix ratio.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>66</b>	Disperse the aggregate using a method that provides a uniform, consistent coverage of aggregate and minimizes aggregate rolling or bouncing into final position.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>67</b>	First course applications that do not receive enough aggregate before the polymer gels shall be removed and replaced. A second course applied with insufficient aggregate may be left in place, but will require additional applications before opening to traffic.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>68</b>	After completion of each course, cure the overlay according to the manufacturer's instructions. Follow the minimum cure times listed under C.5 or as prescribed by the manufacturer	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>69</b>	Remove the excess aggregate from the surface treatment by sweeping, blowing, or vacuuming without tearing or damaging the surface; the material may be re-used if approved by the engineer and manufacturer.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>70</b>	Apply all courses of the overlay system before opening the area to traffic. Do not allow equipment or traffic on the treated area until directed by the engineer.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>71</b>	After the first layer of coating has cured to the point where the aggregate cannot be pulled out, apply the second layer.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>72</b>	Before applying the second layer, broom and blow off the first layer with compressed air to remove all loose excess aggregate.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>73</b>	Before opening to traffic, clean expansion joints and joint seals of all debris and polymer.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>74</b>	A minimum of 3 days following opening to traffic, remove loosened aggregates from the deck, expansion joints, and approach pavement.	<input type="checkbox"/> YES	<input type="checkbox"/> NO									
<b>75</b>	<b>APPLICATION RATES</b>	<b>Spec Compliance</b>										
<b>76</b>	<p>Apply the polymer overlay in two separate courses in accordance with the manufacturer's instructions, but not less than the following rate of application.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Course</th> <th>Minimum Polymer Rate<sup>[1]</sup> (GAL/100 SF)</th> <th>Aggregate<sup>[2]</sup> (LBS/SY)</th> </tr> </thead> <tbody> <tr> <td align="center">1</td> <td align="center">2.5</td> <td align="center">10+</td> </tr> <tr> <td align="center">2</td> <td align="center">5.0</td> <td align="center">14+</td> </tr> </tbody> </table> <p><sup>[1]</sup> The minimum total applications rate is 7.5 GAL/100 SF.  <sup>[2]</sup> Application of aggregate shall be of sufficient quantity to completely cover the polymer.</p>	Course	Minimum Polymer Rate <sup>[1]</sup> (GAL/100 SF)	Aggregate <sup>[2]</sup> (LBS/SY)	1	2.5	10+	2	5.0	14+	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Course	Minimum Polymer Rate <sup>[1]</sup> (GAL/100 SF)	Aggregate <sup>[2]</sup> (LBS/SY)										
1	2.5	10+										
2	5.0	14+										
<b>77</b>	<b>MINIMUM CURING PERIODS</b>	<b>Spec Compliance</b>										
<b>78</b>	As a minimum, cure the coating as follows:	<input type="checkbox"/> YES	<input type="checkbox"/> NO									

**Section 2 – Bid Specifications – Submit with Bid**

	Average temperature of deck, polymer and aggregate components in degrees F										
	Course	50-54	55-59	60-64	65-69	70-74	75-79	80-84			85-99
	1	6 hrs.	5 hrs.	4 hrs.	3 hrs.	2.5 hrs	2 hrs	1.5 hrs.			1 hr.
	2	8 hrs.	6.5 hrs.	6.5 hrs.	5 hrs.	4 hrs.	3 hrs.	3 hrs.			3 hrs.
<b>79</b>	If faster cure times are desired and achievable, submit to the engineer a certified test report from an independent laboratory showing the material is able to reach a compressive strength of 1000 psi as tested per ASTM C 579 Method B within the temperature ranges and cure times for which the product is proposed to be placed.								<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>80</b>	Establish ambient air, material, and substrate temperatures from the manufacturer for field applications. Field applications will not be allowed below the documented temperatures.								<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>81</b>	<b>REPAIR OF POLYMER OVERLAY</b>								<b>Spec Compliance</b>		
<b>82</b>	Repair all areas of unbonded, uncured, or damaged polymer overlay for no additional compensation.								<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>83</b>	Submit repair procedures from the manufacturer to the engineer for approval.								<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>84</b>	Absent a manufacturer’s repair procedures and with the approval of the engineer, complete repairs according to the following: Saw cut the limits of the area to the top of the concrete; remove the overlay by scarifying, grinding, or other approved methods; shot blast or sand blast and air blast the concrete before placement of polymer overlay; and place the polymer overlay according to section C.3.								<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>85</b>	<b>MEASUREMENT</b>								<b>Spec Compliance</b>		
<b>86</b>	The department will measure Polymer Overlay by the square yard, acceptably completed.								<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>87</b>	<b>PAYMENT</b>								<b>Spec Compliance</b>		
<b>88</b>	The department will pay for measured quantities at the contract unit price under the following bid item:								<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	ITEM NUMBER	DESCRIPTION	UNIT								
	509.5100.S	Polymer Overlay	SY								
<b>89</b>	Payment is full compensation for preparing the surface; for tensile bond testing; for creating the transitional area; for providing the overlay; for cleanup; and for sweeping/vacuuming and disposing of excess materials.								<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>90</b>	<b>COMPLETEION DATE</b>								<b>Spec Compliance</b>		
<b>91</b>	Work on project must be completed by July 31 <sup>st</sup> , 2022 unless approved in writing by engineer								<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<b>92</b>	<b>INVOICING</b>								<b>Spec Compliance</b>		

**Section 2 – Bid Specifications – Submit with Bid**

<b>93</b>	An invoice shall be issued and emailed to the Dane County invoice email address found on the Bill To section of each Dane County purchase order issued.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>94</b>	All invoices shall comply with the pricing and markups established by this specification and bid and/or Dane County contract.	<input type="checkbox"/> YES	<input type="checkbox"/> NO



<b>PRICE PROPOSAL</b>
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VENDOR NAME: \_\_\_\_\_

Pricing shall be inclusive of all labor, delivery costs and other expenses necessary to provide product in accordance with the specifications and terms and conditions of this bid document and your proposal.

<b>Project location &amp; description</b>
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**B-13-0311, CTH BW (W. Broadway) over US 12/18:**

Apply protective surface treatment to the entire top surface of the bridge deck. The contractor will need to coordinate schedule with Dane County Highway at least 1 week in advance of the work so that traffic control can be verified and an inspector assigned.

	ITEM	UNIT	QTY	UNIT PRICE	TOTAL PRICE
509.5100.1	POLYMER OVERLAY	SY	2,170	\$	
619.1000	MOBILIZATION	EA	2	\$	
				<b>GRAND TOTAL</b>	<b>\$</b>