

# **PARKING LOT SEALING AND STRIPING**

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UNIVERSITY OF SOUTHERN INDIANA

## **PROJECT MANUAL**

PROJECT REQUIREMENTS AND TECHNICAL SPECIFICATIONS





# **PARKING LOT SEALING AND STRIPING**

UNIVERSITY OF SOUTHERN INDIANA

8600 University Boulevard  
Evansville, Indiana 47712

prepared by

**University of Southern Indiana  
Facility Operations and Planning**

8600 University Boulevard  
Evansville, Indiana 47712



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UNIVERSITY OF SOUTHERN INDIANA

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## **INFORMATION FOR BIDDERS**

PARKING LOT SEALING AND STRIPING  
UNIVERSITY OF SOUTHERN INDIANA

**PROJECT TITLE:** PARKING LOT SEALING AND STRIPING  
University of Southern Indiana

**PROJECT OWNER:** University of Southern Indiana

**PROJECT LOCATION:** University of Southern Indiana  
8600 University Boulevard  
Evansville, Indiana 47712

**PLANS PREPARED BY:** University of Southern Indiana  
Facility Operations and Planning  
8600 University Boulevard  
Evansville, Indiana 47712

### **PROCUREMENT OF DOCUMENTS:**

Construction documents and specifications can be obtained through the University of Southern Indiana Office of Procurement Services located in the Support Services Building on the university campus.

### **BIDDING:**

Refer to attached Request for Proposal for bid date and time.

### **EXAMINATION OF THE SITE:**

Each bidder shall visit the site of the proposed work and become fully acquainted with conditions as they exist so the bidder may fully understand the facilities, difficulties and restrictions related to the execution of the proposed work.

### **CONSTRUCTION SCHEDULE:**

The Contractor shall state on his bid form when the project can be started and is expected to be completed. All work included in this project shall be scheduled through the University of Southern Indiana Facilities Operations and Planning Department.

Refer to DIVISION 01, SECTION 01 32 16 - construction progress schedule for project scheduling requirements.

### **RIGHT TO REJECT BID PROPOSALS:**

The Owner reserves the right to waive irregularities and to reject any or all bid proposals.

## **PROJECT MANAGEMENT AND CONTACT PERSONS:**

All questions regarding specific details pertaining to the construction documents or specifications shall be directed to the following:

Miles Mann  
Associate Director  
University of Southern Indiana  
Facility Operations and Planning  
8600 University Boulevard  
Evansville, Indiana 47712  
phone: 812.464.1808  
fax: 812.465.7159

## **GENERAL DEFINITIONS AND STANDARDS:**

When the word “contract” is used to describe “construction contract”, “contract documents”, “contract time”, etc., in these specifications, it may not directly refer to the use of a contract and may refer only to the use of a purchase order or similar agreement.

When the word “construction” is used in these specifications it refers to the extent of work described in the specifications and enclosed drawings.

Specifications format: These specifications are organized into DIVISIONS and SECTIONS based on Construction Specifications Institute’s (CSI) Master Format 2004.

1. Abbreviated language: Language used in these specifications is abbreviated. Implied words and meanings shall be interpreted as appropriate. Singular words will be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates.
2. Streamlined language: The specifications generally use the imperative mood and streamlined language. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor or by others when so noted.
3. The words “shall be” are implied where a colon is used within a sentence or phrase.

Copies of standards: Copies of applicable standards are not bound with the contract documents. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies from the publication source.

Permits, licenses and certificates: For the Owner’s records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgements, correspondence, records and similar documents, established with compliance with standards and regulations bearing upon the performance of the work in this contract.

## **RETURN OF BID DOCUMENTS:**

All bidders, with the exception of the apparent low bidder, are required to return bid documents (construction drawings and specifications only) to the University of Southern Indiana, Office of Procurement Services or the Facilities Operations and Planning Department within 5 days after the submission of bids.

**end of INFORMATION FOR BIDDERS**

**BID PROPOSAL FORM**

PARKING LOT SEALING AND STRIPING  
UNIVERSITY OF SOUTHERN INDIANA

**PARKING LOT SEALING AND STRIPING**

UNIVERSITY OF SOUTHERN INDIANA

**BIDDER:** \_\_\_\_\_

Address: \_\_\_\_\_ PO Box \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Fax Number \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Pursuant to notice given, the undersigned, having examined the Bidding Documents and the site of the proposed Work and being familiar with all conditions affecting the construction of the proposed work, including the availability of materials and supplies, agrees to furnish all labor and materials, equipment and services necessary for the proper completion of the work at the prices stated below in accordance with Bidding Documents prepared by the University of Southern Indiana Facility Operations and Planning Department.

In the Bid Proposal, the amounts shall be shown in both words and figures. In the case of discrepancy between the words and the figures, the words shall govern.

**BASE BID:**

\_\_\_\_\_ DOLLARS

\$ \_\_\_\_\_

**BASE BID BREAKOUT COST:**

Cost of work being performed by minority contractors/subcontractors:

\_\_\_\_\_ DOLLARS

\$ \_\_\_\_\_

**ADDENDA:**

The Bidder hereby acknowledges receipt of and inclusion in the Bid proposal of the following issues of addenda, if any, distributed by the Owner.

Receipt of Addenda: 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_



**TIME OF COMPLETION:**

If awarded this contract, work shall be started and completed by the following dates with timely receipt of "Notice to Proceed":

start date: \_\_\_\_\_ completion date: \_\_\_\_\_

**REVIEW OF ONLINE DOCUMENTS:**

The following supplemental documents have been reviewed online and the bidder understands conditions and requirements of these documents: <http://www.usi.edu/phyplant/bidindex.asp>

- \_\_\_\_\_ SAMPLE – Owner-Contractor Contract
- \_\_\_\_\_ SAMPLE – Escrow Agreement
- \_\_\_\_\_ Guidelines on Sexual Harassment
- \_\_\_\_\_ USI’s Supplementary Conditions to AIAA201-2007
- \_\_\_\_\_ Construction Change Order Worksheet
- \_\_\_\_\_ Change Order Pricing Guidelines
- \_\_\_\_\_ Contractor Participation Form
- \_\_\_\_\_ Certificate of Substantial Completion
- \_\_\_\_\_ Project Closeout Checklist
- \_\_\_\_\_ University of Southern Indiana Tobacco Free Policy

**SITE VISIT:**

Have visited the site: YES \_\_\_\_\_ NO \_\_\_\_\_

**REFERENCES:**

If the Firm bidding has not completed previous work at the University, list references and contact information for private firms for which you have performed work.

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**GENERAL AGREEMENTS:**

The Bidder, by submitting a bid for this project, agrees to the following:

The Bidder has had the opportunity to examine the Site of the Work and has examined the Contract Documents, therefore.

The Bidder has carefully prepared the Bid Proposal upon the basis thereof and has carefully examined and checked the Bid Proposal and the materials, equipment and labor required thereunder, the cost thereof, and figures therefore, and hereby states that the amount or amounts set forth in the Bid Proposal is, or are, correct and that no mistakes or error has occurred in the Bid Proposal or in the Bidder’s computations upon which the Bid Proposal is based and the Bidder agrees that no claim for reformation, modification, rescission or correction of the Bid Proposal will be made after the scheduled closing time for the receipt of Bid Proposals.

The Bidder understands that the Owner reserves the right to reject any or all Bids and to waive any informalities in the Bidding.

The Bidder agrees that this Bid shall not be withdrawn for a period of 60 calendar days after the scheduled closing tie for receiving Bids.

The Bidder understands that the Owner will not be liable for any amount in excess of the Stipulated Sum, except as expressly stated in written Change Orders duly executed and delivered by the Owner.

In preparing the Bid Proposal, the Bidder has verified and is reasonably assured of the availability of all labor, materials and products in this document.

The Bidder understands that he shall perform with his organization on the project site, construction labor amounting to no less than twenty-five percent (25%) of the total contract cost.

The Bidder will carry the following insurance and list the University of Southern Indiana as additionally insured on a certificate of insurance. If unable to carry this insurance please submit insurance amounts for your company.

|  |  |
|--|--|
| Commercial General Liability (CGL)     | \$2 Mil Occurrence<br>(this could be \$1 Mil with umbrella with additional \$1 Mil |
| Auto Liability                         | \$1 Mil Occurrence/Combined Single Limit   |
| Workers' Compensation*                 | Statutory Benefits<br>\$1 Mil Employers Liability<br>\$1 Mil Occupational Disease  |
| Contractors' Pollution,Legal Liability | \$1 Mil Occurrence/ \$2 Mil Aggregate  |

**CIVIL RIGHTS:**

Signing the Bid Proposal is certification that the Bidder does not or will not discriminate against any employee on the basis of race, religion, color, sex or national origin. The Bidder further certifies that the Bidder does not maintain or provide for employee facilities which are segregated on any of the above categories.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
(Name of Firm)

(affix corporate seal here)

\_\_\_\_\_  
(Street address)

\_\_\_\_\_  
(City, state, zip code)

\_\_\_\_\_  
(by)

\_\_\_\_\_  
(title)

Please check as appropriate:

\_\_\_\_\_ An individual

\_\_\_\_\_ A Partnership between: \_\_\_\_\_

\_\_\_\_\_ A Corporation organized under the laws of the State of \_\_\_\_\_.

**SUBCONTRACTOR LIST:**

The Bidder’s attention is directed to the fact that the maximum amount of work that may be subcontracted on this project will be seventy-five percent (75%) of the total amount of the bid.

List below each major trade of work and major material category for this project and the subcontractor and or supplier involved with that portion of work. The listing of the bidder as the subcontractor for a work trade certifies that the bidder has in current employment, skilled staff and necessary equipment to complete work in that trade. The listing of more than one subcontractor for a trade will invalidate the bid.

| TRADE/MATERIAL | COMPANY/SUPPLIER NAME |
|----------------|-----------------------|
| _____          | _____                 |
| _____          | _____                 |
| _____          | _____                 |
| _____          | _____                 |
| _____          | _____                 |
| _____          | _____                 |
| _____          | _____                 |
| _____          | _____                 |

List of participating minority sub-contractors:

| TRADE/MATERIAL | COMPANY/SUPPLIER NAME |
|----------------|-----------------------|
| _____          | _____                 |
| _____          | _____                 |
| _____          | _____                 |
| _____          | _____                 |
| _____          | _____                 |

**end of BID PROPOSAL FORM**

## **SUPPLEMENTAL REQUIREMENTS, GUIDELINES AND PROCEDURES**

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### **PROJECT BIDDING REQUIREMENTS**

Supplemental documents outlining University of Southern Indiana requirements, guidelines and procedures can be found at the link below. All prospective bidders shall review the documents pertaining to this project prior to submissions of bids. Prospective bidders shall note on the bid form that applicable documents have been reviewed and requirements are fully understood.

<https://www.usi.edu/facilities/campus-planning/bidding>

Index of documents posted on above website:

- SAMPLE – Owner-Contractor Contract
- SAMPLE – Escrow Agreement
- Guidelines on Sexual Harassment
- USI’s Supplementary Conditions to AIA 201-1997
- USI’s Supplementary Conditions to AIA 201-2007
- Construction Change Order Worksheet
- Change Order Pricing Guidelines
- Contractor Participation Form
- Certificate of Substantial Completion
- Project Closeout Checklist
- University of Southern Indiana Tobacco Free Policy

If bidders are unable to view documents online or would like to request a paper copy, documents will be provided upon request to the University.

USI’s Supplementary Conditions to AIA A201-2007 are only required for this project if General Conditions – A201-2007 are included.

The Owner-Contractor Contract and Escrow Agreement shall only be required for projects exceeding ONE-HUNDRED FIFTY THOUSAND DOLLARS (\$150,000.00) construction cost and are considered public works by the State of Indiana. The Construction Change Order Worksheet shall only be required when an Owner-Contractor Contract is used.

The Guidelines on Sexual Harassment, Change Order Pricing Guidelines, Contractor Participation Form, Certificate of Substantial Completion, Project Closeout Checklist, and the University of Southern Indiana Tobacco Free Policy apply to all projects unless otherwise determined by the University at time of construction.

### **PROJECT CLOSEOUT DOCUMENTS**

The Project Closeout Checklist and required closeout documents shall be submitted to the USI project manager prior to release of final payment. On contract projects with retainage, no retainage shall be released until all closeout documents are received. On purchase order projects without retainage, 10% of the final purchase order amount will be held until all closeout documents are received.

### **PROJECT DOCUMENT SUBMITTALS**

All construction related documents submitted to the University of Southern Indiana – i.e., shop drawing submittals, as-built drawings, O&M Manuals, etc. - shall be submitted electronically in PDF format to the USI Facility Operations and Planning project manager.

### **PAY APPLICATION SUBMITTALS**

For projects with construction documents prepared by the University of Southern Indianan, all applications for payment and all supporting materials shall be submitted electronically to both the USI Facility Operations and Planning project manager and to [UofSouthernIndiana@easyaccessap.com](mailto:UofSouthernIndiana@easyaccessap.com) for processing.

For projects with construction documents prepared by outside design firms, all applications for payment and all supporting materials shall be submitted to both the USI Facilities Operations and Planning project manager and the design firm - the design firm will approve or take appropriate action and then forward the application for payment electronically to both the USI Facilities Operations and Planning project manager and to [UofSouthernIndiana@easyaccessap.com](mailto:UofSouthernIndiana@easyaccessap.com) for processing.

### **REPORTING UNETHICAL OR FRAUDULENT BEHAVIOR**

The University is committed to the highest standards of moral, legal, and ethical behavior in all its business operations. If you know or suspect that any USI employee is engaged in unethical or fraudulent behavior, please file a report with the Internal Audit office via one of these designated methods: send an email to [fraud@usi.edu](mailto:fraud@usi.edu), access the Fraud Hotline link at <https://www.usi.edu/finance-and-administration/fraud-hotline>, or leave a phone message at 812.465.1028. If you choose to remain anonymous, file your report through the Web site or by telephone.

**end of SUPPLEMENTAL REQUIREMENTS, GUIDELINES AND PROCEDURES**

**1.01 GENERAL**

- A. The project consists of the work associated with sealing and striping existing parking lots and roadways in various areas on the University of Southern Indiana campus, 8600 University Boulevard, Evansville, Indiana 47712.
- B. Contract documents, dated April 05, 2023, were prepared for the project by the University of Southern Indiana Facility Operations and Planning Department.
- C. The work will be constructed under a single prime contract.
- D. The work will be constructed in one phase.
- E. Use of the site: Limit use of premises to areas indicated and as required by construction. Do not disturb portions of the site and/or existing building beyond the areas indicated. Do not disturb areas not included in this project.
- F. Use of the existing site and/or existing building: Repair damage caused by construction. Protect the site and adjacent sites and its occupants during construction.
- G. Allow for Owner occupancy and use by the public areas adjacent to the site as required for daily operations of the University. Provide the necessary fencing, barricading, and protection around the perimeter of the construction site as required to protect adjacent facilities and people from damage or injury.
- H. Keep driveways and entrances clear. Do not use these areas for parking or material storage. Schedule deliveries to minimize on-site storage of materials and equipment.
- I. The parking of all vehicles not directly associated with delivery and/or construction of the project shall be parked in designated areas indicated by the Owner. Vehicles shall not be parked on or adjacent to the construction site. The Owner reserves the right to request the relocation of any and all vehicles parked on or near the construction site.
- J. Full Owner occupancy: The Owner will occupy areas adjacent to the construction site during construction. Cooperate with the Owner to minimize conflicts and facilitate Owner usage.
- K. Partial Owner occupancy: The Owner reserves the right to occupy and to place and install equipment in completed areas of the building/site prior to substantial completion. Placing equipment and partial occupancy do not constitute acceptance of the work.
- L. Delivery of materials: The Contractor shall provide the means to accept, unload and store all materials required for the project. The Owner will not accept or sign for any materials delivered to the University of Southern Indiana campus or project site which has been ordered by the Contractor for intended use in the project.

**2.01 PRODUCTS**

**3.01 EXECUTION**

- A. Work sequence: The general Contractor will be responsible for overall scheduling of the project and will sequence portions of the project as necessary to expedite the progress of the work. The general Contractor shall consult and cooperate with the Owner during the construction process as necessary to provide portions of the work to the job site in a timely manner.
1. Refer to DIVISION 01, SECTION 01 32 16 – construction progress schedule for additional information pertaining to project sequence and scheduling.

**end of SECTION 01 10 00**



**1.01 GENERAL**

- A. This SECTION specifies administrative and procedural requirements for handling and processing contract modifications.
  - 1. Requirements of this SECTION are to be used for all construction, renovation and repair projects.
    - a. When form AIA A201 and the AIA A201 Supplemental Conditions are included in this project manual, they shall have precedence over requirements of this SECTION.
  - 2. The Owner reserves the right to waive any and/or all requirements of this SECTION depending on size of project and scope of work as determined by the Owner. If requirements are not waived by Owner, the Contractor shall the contract modification procedures detailed in this SECTION.
- B. Minor changes in the work: The Owner will issue instructions authorizing minor changes in the work which do not substantiate changes to the original contract amount or schedule.
- C. Owner-initiated change order proposal requests: The Owner will issue a description of proposed changes in the work that require adjustment to the contract sum and/or time. The description may include supplemental or revised drawings and specifications.
  - 1. Proposal requests are for information only. Do not consider them an instruction to stop work or to execute the proposed change.
  - 2. Submit a quotation of costs and time necessary to execute the change for the Owner's review.
    - a. Include an itemized list of products required or eliminated and unit costs, with total amount of purchases and credits to be made.
    - b. Indicate applicable taxes, delivery charges, equipment rentals and amounts of trade discounts.
    - c. Indicate costs of labor and supervision directly attributable to the change.
    - d. Indicate the effect the change will have on the contract time.
- D. Contractor-initiated proposals: When latent or unforeseen conditions require modifications, the Contractor may submit a request for a change to the Owner.
  - 1. Include a statement outlining reasons for the change and the effect of the change on the work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the contract sum and contract time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental and amounts of trade discounts.
  - 4. Indicate costs of labor and supervision directly attributable to the change.
  - 5. Indicate if the proposed change requires substitution of one or more products or systems specified.

- E. Construction change directive: When the Owner and Contractor disagree on the terms of a proposal request, the Owner may issue a construction change directive instructing the Contractor to proceed with a change.
1. The construction change directive contains a description of the change and designates the method to be followed to determine change in the contract sum or time.
  2. Documentation: Maintain detailed records on a time and material basis of work required by the construction change directive.
    - a. After completing the change, submit an itemized account and supporting data to substantiate contract adjustments.
- F. Change order procedures: Upon the Owner's approval of the change order proposal request, a change order will be issued through the University of Southern Indiana.
1. The work associated with the change order request shall not be started prior to written approval by the Owner. Exceptions may be made for the start and completion of such work as required for emergency situations as approved by the Owner prior to obtaining written authorization.
  2. For projects awarded by issuance of a Purchase Order from the Owner, change orders will be processed within the Owner's change order system and notice will be given to the Contractor.
  3. For projects awarded by issuance of a signed Owner-Contractor Construction Contract, a Change Order will be prepared by the Architect and signed by representatives of the Owner and the Contractor.

**2.01 PRODUCTS**

**3.01 EXECUTION**

**end of SECTION 01 26 00**

**1.01 GENERAL**

- A. All work shall be performed during normal University working hours (7:00 am – 5:00 pm, Monday through Friday) except in circumstances in which the work may produce hazardous conditions or may disrupt the daily functions of the building or site.
1. Disruption of daily work shall be determined by the Owner at the time of construction at which time work shall be scheduled and completed outside of the normal working hours previously specified.
  2. The Contractor, at his own discretion, in the interest of the construction schedule of the project, may choose to work outside of the normal working hours, at no additional cost to the Owner, if working conditions permit and if approved by the Owner.
  3. All work to be completed in occupied spaces or areas in which daily functions may be disrupted shall be scheduled through the University of Southern Indiana Facilities Operations and Planning Department.
  4. The work in this project shall be constructed in a sequential order as to minimize the disruption of University operations and to allow access to adjacent buildings and areas at all times where required by the Owner. The sequencing of work shall be scheduled through the Owner prior to the start of such work.
  5. All work to be completed, both during normal working hours and outside of normal working hours shall be scheduled through the University of Southern Indiana Facility Operations and Planning Department. To schedule work, contact Miles Mann at 812.464.1808.
- B. The Contractor shall state on his bid form when the project can be started and is expected to be completed.
1. Extensions in the construction schedule will be permitted only in extreme cases of construction delay due to weather or extreme natural causes. The Owner reserves the right to determine the validity of the cause of delay and the right to permit such delays without affect to the construction contract. All delays in construction will be approved by the Owner.
  2. Overtime, night and weekend work will be at no additional cost to the Owner unless approved by the Owner prior to the start of such work.
  3. Failure of the Contractor to maintain his portion of the construction schedule will be grounds for the Owner to withhold all or part of any payments which may become due to the Contractor for work completed.

**2.01 PRODUCTS**

**3.01 EXECUTION**

- A. Construction schedule: All work shall begin promptly up receipt of Purchase Order or Notice to Proceed from the University and work shall be completed, and the construction site/area cleaned of all materials, debris and related construction items on or before August 15, 2022.

**end of SECTION 01 32 16**



## 1.01 GENERAL

- A. Submit written warranties to the Owner prior to substantial completion.
- B. The Contractor shall warrant all materials, equipment and installation against defects for a period of one year from the date of final acceptance of work. Any defects found shall be promptly repaired by the Contractor at no cost to the Owner.
- C. Disclaimers and limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers and Subcontractors required to countersign special warranties with the Contractor.
- D. Related damages and losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
- E. Reinstatement of warranty: When work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- F. Replacement cost: Upon determination that work covered by a warranty has failed, replace or rebuild the work to an acceptable condition complying with requirements of the contract documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the Owner has benefited from the use of the work through a portion of its anticipated useful service life.
- G. Rejection of warranties: The Owner reserves the right to reject warranties and to limit selection of products with warranties not in conflict with requirements of the contract documents.
  - 1. Where the contract documents require a special warranty, or similar commitment, the Owner reserves the right to refuse to accept the work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

## 2.01 PRODUCTS

### 3.01 EXECUTION

- A. Provide Owner with manufacturer's written warranties for materials and products installed.
- B. Contractor shall warranty all materials and workmanship against defects for a period of one (1) year from date of acceptance of work. Any defects shall be promptly repaired by the contractor at no cost to the owner.

end of SECTION 01 78 36



**1.01 GENERAL**

- A. This SECTION includes refined coal tar emulsion seal coat slurry over asphalt concrete paving.

**2.01 PRODUCTS**

- A. Materials: Provide the following: Brewer Cote® Asphalt Pavement Sealer – alternate manufacturers accepted as approved by Owner.
- B. Product Description: Brewer Cote® is a high solids, concentrated refined tar emulsion pavement sealer produced with a colloid mill for consistent tar particle size and distribution. Formulated with a select blend of fillers proportioned for exceptional wear resistance, Brewer Cote® provides the quality conscious contractor a higher dilution rate for maximum solids content on the pavement. Brewer Cote® exhibits outstanding wear resistance and is highly resistant to gasoline, oil and ultraviolet light, providing superior protection for asphalt pavement surfaces. Brewer Cote® meets or exceeds all composition and performance requirements of ASTM Specification D5727.
- C. Additives: Brewer Enhanced Latex Additive must be used. Enhanced Latex Additive increases wear resistance in high traffic applications, while decreasing drying and cure time. See Table for mix design.

| Areas         | Mix Type                 | Number of Coats | Brewer Cote Gallons | Water Gallons | Aggregate Pounds | Additive Gallons |
|---------------|--------------------------|-----------------|---------------------|---------------|------------------|------------------|
| Parking Areas | Latex Fortified Emulsion | 2               | 100                 | 40            | 3-4              | 2-3              |
| Drive Lanes   | Latex Fortified Emulsion | 3               | 100                 | 40            | 3-4              | 2-3              |

**3.01 EXECUTION**

- A. Provide two (2) applications of sealer (refined coal tar emulsion slurry) in all areas. Provide a third coat on all roadways/drive lanes.
- B. Preparation: Apply coating when pavement temperature is a least fifty (50) degrees F. and air temperature is fifty (50) degrees F. and rising. Clean pavement surface prior to applying coating.
- C. Application:
  - 1. Apply all coats uniformly at a rate of 0.14 - 0.17 gallons per square yard per coat using mixed and diluted material.
  - 2. Allow each coat to cure sufficiently to take traffic without scuffing.
  - 3. Allow final coat to cure a minimum of twenty-four (24) hours under good drying conditions before allowing traffic.
- D. Pavement striping: Apply pavement marking paint with mechanical equipment to produce pavement markings of dimensions indicated with uniform, straight edges. Apply at manufacturer’s recommended rates to provide a minimum wet film thickness of 15 mils (0.4 mm). Allow the sealcoat to dry at least 24 hours before striping.

**end of SECTION 32 18 26**





## 1.01 GENERAL

- A. Section Includes: This item shall consist of cleaning, heat lancing, and sealing the existing transverse and longitudinal cracks and joints and random cracks in bituminous pavements in accordance with these specifications and in conformity with the details shown on the plans (if applicable).
- B. References: The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.

ASTM International (ASTM):

1. ASTM D6690 – Standard Specification for Joint and Crack Sealants, Hot Applied, For Concrete and Asphalt Pavements
  2. ASTM D34 – Test Method for Softening Point of Bitumen
  3. ASTM D5167 – Practice for Melting of Hot Applied Joint and Crack Sealant and Filler for Evaluation
  4. ASTM D5329 – Test Method for Sealants and Fillers, Hot Applied, for Joints and Cracks in Asphalt and Portland Cement Concrete Pavements
- C. Project Conditions:
1. Weather limitations: Apply crack sealant when ambient and surface temperature is above 40°. F. Do not apply when pavement is wet, contains excess moisture, during rain, fog or when frozen.
  2. Maintain access for vehicular and pedestrian traffic as required for other construction activities. Utilize temporary striping, flagmen, barricades, warning signs, and warning lights as required.

## 2.01 PRODUCTS

- A. Sealant: The sealant material shall be Right Pointe 3405 Parking Lot Sealant. No substitutions allowed.
- B. Equipment:
1. All equipment necessary for the crack sealing shall be on the project prior to beginning sealing operations.
  2. Maintain equipment in satisfactory operating condition and correct breakdowns in manner that will not delay or be detrimental to the schedule of paving operations.
  3. Hot Compressed-Air Lance (HCA): The HCA shall be capable of producing air temperature up to 2500oF and constructed of suitable hardware. It shall be provided with separate valves to control propane, burner air, and lance air. The fuel and burner air shall be mixed only at the point of combustion before leaving the burner tube. A separate air lance tube shall pass inside the burner chamber and be orificed to a maximum 1/4". At the fuel source, a high-pressure regulator to control fuel pressure from 5 PSI to 30 PSI and to prevent flashback shall be used. Burner BTU should range from 20,000 to 500,000 BTU. A wheel kit constructed to keep the unit at the proper height and angle from the pavement should be used. No external flame shall be allowed to touch the pavement.

4. Hot-Applied Sealant Applicator (melter): The melter applicator unit shall be a self-contained double boiler device with the transmittal of heat through a heat transfer oil. It must be equipped with an onboard automatic heat-controlling device to permit the attainment of a predetermined temperature, then maintain that temperature as long as required. The unit shall have a means to vigorously and continuously agitate the sealant. The sealant shall be transferred from the unit to the crack by means of a direct-connected feed hose and wand. The equipment should be designed to allow the sealant to be circulated back into the unit when sealing is not being performed or equipped with a temperature controlled heated hose and wand that does not require circulation. Pouring pots or gravity-fed sealant applicators shall not be used for sealing cracks and joints. The sealant should not be heated to a temperature in excess of that specified by the manufacturer.

### **3.01 EXECUTION**

- A. Examination: Inspect area identified for crack sealing. Locate all cracks greater than ¼" wide for sealing. Cracks that are less than ¼" will not require sealing unless they are a continuation of a wider crack.
- B. Preparation: Clean the crack by means of hot compressed air lance. Use wire brushes where needed to remove all debris, old sealant, and otherwise deleterious material. Inspect the crack for cleanliness and dryness after cleaning.
- C. Application: Small, Medium and Large Cracks
  1. HCA lance the crack within 10 minutes of application of the sealant. Equipment for the two operations should be kept in a compact configuration such that not more than 50 feet separates equipment required by the two operations.
  2. Apply the sealant in the crack uniformly from the bottom to the top. Place joint filler without formation of entrapped air or voids. Overband to be no wider than 2.5"
- D. Protection of work: Vehicular traffic shall not be permitted on the pavement in the areas of the treated cracks and joints during the curing period. The contractor shall supply all temporary traffic control devices (barricades, cones, signing, etc.) to protect the sealant, as required and directed by the Engineer. Any damage to uncured sealant shall be repaired at the contractor's expense.

**end of SECTION 32 20 00**

**Description:**

Brewer Cote® is a high solids, concentrated refined tar emulsion pavement sealer produced with a colloid mill for consistent tar particle size and distribution. Formulated with a select blend of fillers proportioned for exceptional wear resistance, Brewer Cote® provides the quality conscious contractor a higher dilution rate for maximum solids content on the pavement. Brewer Cote® exhibits outstanding wear resistance and is highly resistant to gasoline, oil and ultraviolet light, providing superior protection for asphalt pavement surfaces. Brewer Cote® meets or exceeds all composition and performance requirements of ASTM Specification D5727 (formerly Federal Specification RP-355).



**Application:**

Brewer Cote® must be applied to clean, structurally sound asphalt pavements that are surface cured and free from all loose and foreign debris. Wide cracks, alligatored areas and soft or sunken pavement must be properly repaired or replaced prior to sealing. Oil and grease spots must be properly cleaned and primed prior to sealing. All vegetation should be treated with a water based herbicide at least one (1) week prior to sealing and removed during final surface preparations.

Brewer Cote® can be applied by using spray equipment, mechanical squeegee equipment, brush or rubber squeegee, designed for such purpose. All application equipment must be capable of applying a sufficient quantity of Brewer Cote® to the pavement to ensure a uniform coating at the specified application rates.

**Key Advantages**

- **High solids content**
- **Colloid milled for consistent, trouble free performance**
- **Formulated with select filler, proportioned for superior wear resistance and deep, jet black color**

**Mix Designs and Usage:**

Brewer Cote®, as supplied, is a concentrated pavement sealer designed to be mixed with water and mineral aggregate to form a ready to use pavement coating. The components are proportioned based upon a number of factors including, age, texture and porosity of the pavement to be sealed, as well as the amount of traffic the pavement will receive (see recommendations on back for further details).

**Aggregates**

Aggregates, such as silica sand and boiler slag, must be washed, graded and free from dust, clay or other foreign contaminants. The aggregate must be angular and of medium grain fineness.

**Latex Additives**

Approved latex additives may be added to Brewer Cote® to improve the sealer's durability, gas and oil resistance, drying time and color (see recommendations on back for further details).

**Brewer Cote® Typical Properties:**

| Property          | ASTM D 5727 | Typical        |
|-------------------|-------------|----------------|
| Sp. Gr. @ 25 °C   | 1.20 min.   | 1.21           |
| Non-Volatile,%    | 47.0 min    | 51.5           |
| Ash Content, %    | 30.0-40.0   | 36.5           |
| Water Content, %  | 53.0 max.   | 48.5           |
| Drying Time, hrs. | 8.0 max.    | 4.0            |
| Cured Color       | N/A         | Charcoal Black |



# Brewer Cote®

## Concentrated Pavement Sealer

### Mix Designs:

| Areas of Use                         | Type of Mix              | No. of Coats | Brewer Cote® gals. | Water gals. | Aggregate lbs. | Additive gals. |
|--------------------------------------|--------------------------|--------------|--------------------|-------------|----------------|----------------|
| Pedestrian Only (playgrounds)        | Latex fortified emulsion | 1st coat     | 100                | 50-60       | 100-200        | 2-3            |
|                                      |                          | 2nd coat     | 100                | 50-60       | 100-200        | 2-3            |
| Low Traffic (residential drive-ways) | Standard emulsion        | 1st coat     | 100                | 35-50       | 0-200          | 0              |
|                                      |                          | 2nd coat     | 100                | 30-45       | 100-200        | 0              |
|                                      | Latex fortified emulsion | 1st coat     | 100                | 40-55       | 0-200          | 1-2            |
|                                      |                          | 2nd coat     | 100                | 35-50       | 100-200        | 1-2            |
| Moderate Traffic (parking areas)     | Latex fortified emulsion | 1st coat     | 100                | 40-55       | 0-300          | 2-3            |
|                                      |                          | 2nd coat     | 100                | 35-50       | 100-300        | 2-3            |
| High Traffic (drive lanes)           | Latex fortified emulsion | 1st coat     | 100                | 40-55       | 0-400          | 3-4            |
|                                      |                          | 2nd coat     | 100                | 35-50       | 100-400        | 3-4            |
|                                      |                          | 3rd coat     | 100                | 45-60       | 100-400        | 3-4            |

### Coverage:

Based upon the above referenced mix designs, Brewer Cote® coverage rates are as follows:

- 1st coat - 0.10-0.15 gal/square yard
- 2nd coat - 0.08-0.12 gal/square yard
- 3rd coat - 0.08-0.12 gal/square yard

When multiple coats are used, allow previous coat to dry so that it will withstand traffic without scuffing before applying the next coat of sealer. Temperatures below 70 °F, relative humidities above 50%, and lack of air movement will retard curing and lengthen the time between coats.

### Limitations:

Brewer Cote® must be applied only when ambient and pavement temperatures are a minimum of 50 °F and are expected to remain there for at least twenty-four (24) hours after sealer application.

Brewer Cote® must not be applied during rainy or wet conditions such as foggy or overcast days with high relative humidity or when rain is predicted within twenty-four (24) hours after sealer application.

When the ambient temperature is in excess of 85 °F, the

pavement should be fogged with clean water immediately prior to sealer application, to facilitate better bonding and even spreading of sealer. All standing water must be removed prior to sealer application.

Contact The Brewer Company for warranty information.

### Precautions:

Apply Brewer Cote® to unsealed asphalt pavements or to surfaces previously sealed with refined tar emulsion pavement sealers.

Pavements previously sealed with asphalt emulsion pavement sealers should be allowed to weather for a minimum of two (2) years or until 50% of the pavement aggregate is exposed, before sealing with Brewer Cote®.

New asphalt pavements and repair areas shall be allowed to cure a minimum of sixty (60) days at a minimum daytime temperature of 60 °F before sealing with Brewer Cote®. A simple test to determine if a pavement is ready to be sealed is to cast a gallon or two of clean water over the surface. If the water sheets out, uniformly wetting the surface and no oil rings appear, the surface is ready to be sealed. If the water balls up and/or shows signs of oil rings, the surface is not ready to be sealed and should be allowed to cure longer.

Brewer Cote® contains refined tar. It may cause minor skin irritation. As with all chemicals, wear splash resistant goggles, protective gloves and clothing when applying Brewer Cote®. In case of skin or eye contact, immediately flush area with clean water. Consult Material Safety Data Sheet for more information on safety and handling.

**Keep out of reach of children  
For exterior use only**

**Protect from freezing  
Non-Flammable**

### Packaging:

55 gallon metal drums and 4,500 gallon bulk tankers

**The Brewer Company** 1354 US Highway 50 Milford, Ohio 45150  
800-394-0017

# 15020  
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