

DETAILED SPECIFICATIONS

DESCRIPTION

This work shall consist of cleaning and filling cracks in existing asphalt concrete pavements or asphalt concrete overlays with fiber reinforced asphalt cement.

MATERIALS

a. Fiber Reinforced Crack Filling

Asphalt Cement: The asphalt cement shall be paving grade asphalt meeting the following specifications:

Materials Designation	Viscosity Grade
PG64-22 + Fiber	PG64-22

Fibers: The fibers may be composed of either polypropylene or polyester. The Contractor shall submit the following fiber information to the Department for approval prior to beginning the work:

- Brand Name
- Composition
- Tensile Strength
- Specific Gravity
- Melt Temperature
- Safe Heating Temperature
- Elongation
- Length of Fiber

Composition of Sealant Mixture: The following asphalt cement and fiber proportions shall apply:

Asphalt Grade	Minimum % Fiber by Weight of Asphalt	
	<u>Polyester</u>	<u>Polypropylene</u>
PG64-22	5.0	7.0

Mixing Temperatures: The sealant shall be mixed at the temperatures recommended by the fiber manufacturer but shall not exceed 325° F.

b. Plastic Joint Material

Plastic Joint material shall meet the requirements of ASTM-D6690, TYPE II, Joint Sealants, Hot poured for concrete and asphalt pavements. The material will be accepted on the basis of the manufacturer’s certification that it conforms to the requirements of ASTM-D6690 and that the name of the Primary Source (Manufacturer) and trade name appears on the NYSDOT approved list. The Contractor shall submit a copy of the certification with typical test results for the material with each order.

- Manufacturer’s Name
- Trade name of the filler
- Manufacturer’s lot or batch number
- Pouring Temperature

#2021h-3d – CRACK & JOINT FILLER

- Melt Temperature
- Safe Heating Temperature
- Manufacturer’s recommendations pertaining to heating and application

Filler material heated beyond the safe heating temperature shall not be used. Filler material may be reheated or heated in excess of six hours only if the manufacturer’s instructions on product usage allow it and fresh material is added.

c. Multigrade Asphalt Cement Crack-filling Material

Multigrade asphalt cement shall conform to the following requirements:

<u>Characteristic</u>	<u>MG 10-30</u>	<u>ASTM Test Method</u>
Viscosity ² @140°F P., 1 sec ⁻¹	1000 – 10000	D-4957
Viscosity ² @275°F P., 10 sec ⁻¹	5 – 20	D-4957
Penetration @ 77°F, dmm	55 – 100	D-5
Penetration @ 39°F, 200g, 60sec, dmm	20 – 45	D-5
Flash Point, °F	475+	D-92
Solubility, %	99+	D-2042
Softening Point, °F ¹	130+	D-36
Test After Thin Film Oven Test TFOT		
Viscosity ² @140°F P., 1 sec ⁻¹	1000 – 10000	D-4957
Aging Index Vis ATOT / vis BTOT	2.5-	

1. Handling of all samples for testing shall be in accordance with ASTM D-4957 Section 7.2, which requires heating the sample in an oven maintained a 383°F (± 4°F) Stir the sample occasionally until homogenous and pour in suitable container for testing. Pouring temperatures should be 386°F (± 4°F) on all tests.
2. Normally run using #200 Modified Koppers Viscometer tube at 300mm of vacuum.
3. Normally run using a #50 Modified Koppers Viscometer tube at 30 mm of vacuum.

CONSTRUCTION DETAILS

Pre-Construction Conference. For all In-Place projects, a preconstruction conference shall be held at least five days prior to site work to discuss mix designs, application procedures, maintenance and protection of traffic, public notification, scalar chain, and other operational issues.

Traffic Control: Traffic Control shall be provided by the Contractor in strict compliance with the provisions of the MUTCD. The cost of Traffic Control and any required repair work shall be included in the unit bid price.

Notification: All homeowners and businesses affected by the construction shall be notified 24 to 72 hours prior to the surfacing. This notification shall be in the form of a written posting stating the times and dates that construction is expected on their road. This notification will be prepared and distributed by the Contracting Agency. Should the roadway require closure, the Engineer shall be notified in writing no less than ten days prior to commencement of site work.

Crack Preparation: Prior to application of the sealant all cracks shall be thoroughly cleaned by air blasting such that all dust, dirt and moisture is removed. The cracks shall be cleaned a minimum of 3/4" deep and all debris removed from the crack shall be removed from the pavement to prevent recontamination of the crack.

Preparation of Asphalt Fiber Mixture: The Contractor shall obtain a copy of the manufacturer's recommendation pertaining to the heating, mixing, and application of the sealant. These recommendations shall be adhered to and followed by the Contractor, with such expectations as this specification may require.

The sealant shall be heated in a melter constructed as a double boiler, with the space between the inner and outer shells filled with oil or other heat-transfer medium. Direct heating will not be used. Positive temperature control, mechanical agitation, and a recirculating pump shall be used. The unit shall be provided with separate thermometers to indicate the temperature of the heat transfer medium and the sealant material in the hopper. The mixing unit shall be capable of maintaining the specified mixing temperature, with an allowable variation of +/- 10° F. Storage and subsequent reheating of the fiber mixture will be allowed only if, after reheating, the fiber mixture meets all of the requirements listed in this specification.

The application wand shall produce a band aid type appearance of at least 1 1/2 inches on each side of the crack, as well as filling the crack. The process is called extruding.

The discharge hose shall be equipped with a controlled heating apparatus or shall be insulated sufficiently to maintain the proper sealant temperature. The application wand shall be returned to the machine and the material recirculated immediately upon completion of each crack sealing.

Application of Sealant: The sealant shall not be placed when pavement or ambient temperatures fall below 40° F or when moisture is present in the crack to be filled. The sealant shall be pumped directly into the crack at the pavement surface. The height of the sealant above the pavement surface shall not exceed 1/8".

Blotting with fine aggregates shall directly follow sealant application if traffic results in tracking of the crack sealing material. For cracks exceeding a width of 3", Type 1A stone shall be added to the sealant mixture.

PERFORMANCE WARRANTY

The Contractor attests to the following warranty upon completion of the work and acceptance of final payment:

The Contractor hereby warrants that all workmanship and all materials furnished under this item shall comply fully with the requirements of these specifications. If at any time within two years after the date of the completion of the work, any unfaithful or defective work should appear, which in the opinion of the Superintendent is due to inferior materials or workmanship, the Contractor shall have thirty (30) days, after receiving written notification from the Superintendent, to correct, repair or replace the defective or inferior materials and / or workmanship at his or her expense to the satisfaction of the Superintendent. The guarantee shall be automatically extended to two years from the completion of any corrections, repairs or replacements of defective materials. The cost of inspections, samplings, or tests that reveal defective, inferior or inadequate materials or workmanship and any subsequent inspections, sampling or tests shall be paid by the Contractor.

METHOD OF MEASUREMENT

The quantity to be paid for shall be the actual number of gallons of sealant applied to complete the work as specified. No direct payment will be made for waste material. The Asphalt Price Adjustment procedure is provided within this specification.

BASIS OF PAYMENT

The unit price bid per gallon shall include the cost of all labor, equipment and materials necessary to satisfactorily complete the work.

#2021h-3d – CRACK & JOINT FILLER

BASE AVERAGE F.O.B. TERMINAL DATE: 11/1/2020

BASE AVERAGE F.O.B. TERMINAL PRICE: \$461.00 U.S. TON

PRICE ADJUSTMENTS

Price adjustments will be based on the NYS OGS formula using the average of the F.O.B. terminal price per ton of PG64-22 (AC-20) asphalt cement (base average F.O.B. terminal price), for the date noted above, at the locations determined by NYSDOT for the purpose of this calculation on similar NYSDOT and NYS OGS contracts.

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

The new average terminal price will be determined based on the above F.O.B. terminal prices posted on the 3rd Wednesday of each month, hereafter known as the “Adjustment Date”, during the contract period. However, price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month (i.e. Jan. 1, 200x) following the adjustment.

The unit prices per gallon of bituminous liquid material purchased from any award based on this specifications will be subject to adjustment based on the following formula:

$$\text{Price Adjustment (per gallon)} = \frac{\text{New Average FOB} - \text{Base Average FOB} \times \text{Total Allowable Petroleum}}{\text{Terminal Price}} \times \frac{\text{Terminal Price}}{235}$$

Price Adjustments:

Total % Asphalt plus Fuel:

The % of total allowable asphalt and fuel for each item is as follows:

<u>Grade</u>	<u>%Asphalt</u>	<u>Petroleum Allowance</u>	<u>Total Allowable Petroleum</u>
PG64-22 + Fiber	95%	0.2%	95.2%
ASTM D6690, Type II	56%	0.2%	56.2%
Multigrade + Fiber	95%	0.2%	95.2%

Example: Item PF64-22 + Fiber

Base Avg. Price - \$387.00 New Avg. Price - \$400.00 Total % Asphalt plus Fuel – 95.2%

$\$400.00 - \$387.00 \times .952 = +\$0.53$ per gallon

235

Positive Price Adjustment number shall be added to original per gallon Bid Price and shown separately.

Negative Price Adjustment number shall be subtracted from original per gallon Bid Price and shown separately.

#2021h-3d – CRACK & JOINT FILLER

BID FORM

COMPANY NAME: _____

CRACK and JOINT FILLER

The undersigned, being experienced and responsible for performance of same, hereby agrees to apply (supply, if FOB Plant) bituminous crack and joint sealant materials on County Highways in accordance with the bid requirements.

<i>Gallons Applied per Day</i>	<i>Unit Bid / Gallon</i>		
	<i>a. Fiber Reinforced Crack Filler Material</i>	<i>b. Plastic Joint Material</i>	<i>c. Multigrade Asph Cement Crack-filler</i>
Quantity:	PG64-22 + Fiber	D6690, Type II	
0 to 300 gallons	\$ _____	\$ _____	\$ _____
301 to 600 gallons	\$ _____	\$ _____	\$ _____
601 + gallons	\$ _____	\$ _____	\$ _____

<i>Material Supplied</i>	<i>Unit Bid / delivered</i>
D6690, Plastic Joint Material	\$ _____ Pound

Attached Bid Checklist, Signature/Non-Collusive Page, and Iran Notice must be signed to complete the bid.

BID CHECKLIST

The documents required to complete this bid are indicated below.

(X) Insurance Certificates See Exhibit A, pages F-G

(X) Iran Notice See Pages 7h – 7i

___ We have reviewed and have submitted the items required under the Mandatory Submission Requirements.

___ The Bid Page(s), Signature/Non-Collusive Page, and Iran Notice are completed and included.

___ Deviations are noted and explained.

___ Insurance Certificates are enclosed if required.

WAIVER OF IMMUNITY/NON-COLLUSIVE BIDDING CERTIFICATE PURSUANT TO SECTION 103-D OF THE NEW YORK STATE GENERAL MUNICIPAL LAW

A. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organizations, under penalty of perjury, that to the best of knowledge and belief:

1. The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
2. Unless otherwise required by law, the prices which have been quoted in this bid have not knowingly been disclosed by the bidder and will not knowingly be disclosed by the bidder, directly or indirectly, prior to opening, to any bidder or to any competitor.
3. No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

A bid shall not be considered for award nor shall any award be made where 1,2, and 3 above have not been complied with; provided, however, that in any case the bidder cannot make to foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons thereof. Where 1, 2, and 3 above have not been complied with, the bid shall not be considered for any award nor shall any award be made unless the head of the Purchasing Unit to the political subdivision, public department, agency or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customer of proposed or pending publications of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of paragraph "A" above.

B. Any bid hereafter made to any political subdivision of the state or any public department, agency or official thereof by a corporate bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, local law, and where such bid contains the certification referred to in paragraph "A" of this section, shall be deemed to have been authorized by the Board of Directors of the bidder, and such authorization shall be deemed to include the submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

SIGNATURE PAGE ON REVERSE MUST BE SIGNED TO COMPLETE THE BID.

SIGNATURE PAGE

The undersigned proposes to furnish products or services to specifications included in this bid document, at the price(s) set forth, as required to meet the County's needs. Any deviation to the specifications must be noted on the bid form and fully explained or the deviations will not be considered part of the bid.

Deviations: Yes _____ No _____

By signing below I am certifying that I fully understand the complete requirements of the bid and agree to the non-collusive certification on the reverse of this page and additional documents as specified on the bid checklist. Bidder hereby acknowledges receipt of all addenda pertaining to this bid which are made part of the original bid specifications.

_____ COMPANY NAME

_____ ADDRESS (Principal Office)

_____ CITY, STATE, ZIP CODE

_____ AREA CODE/TELEPHONE NUMBER

_____ FAX NUMBER

_____ AUTHORIZED SIGNATURE

_____ PRINTED NAME

_____ TITLE

_____ DATE

_____ ADDRESS (Local Office)

_____ CITY, STATE, ZIP CODE

_____ AREA CODE/TELEPHONE NUMBER

_____ FAX NUMBER

_____ E-MAIL ADDRESS

Check One: Corporation _____ Partnership _____ Individual _____

Incorporated under the laws of the State of _____

Federal Identification # _____

State if authorized to do business in the State of New York: Yes _____ No _____

Names/Addresses of Partners:

_____	_____
_____	_____
_____	_____

Iranian Energy Sector Divestment

Contractor hereby represents that said Contractor is in compliance with New York State General Municipal Law Section 103-g entitled “Iranian Energy Sector Divestment”, in that said Contractor has not:

- a. Provided goods and services of \$20 Million or more in the energy sector of Iran including but not limited to the provision of oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran; or
- b. Acted as a financial institution and extended \$20 Million or more in credit to another person for forty-five days or more, if that person’s intent was to use the credit to provide goods or services in the energy sector in Iran.

Any Contractor who has undertaken any of the above and is identified on a list created pursuant to Section 165-a (3)(b) of the New York State Finance Law as a person engaging in investment activities in Iran, shall not be deemed a responsible Bidder pursuant to Section 103 of the New York State General Municipal Law.

Except as otherwise specifically provided herein, every Contractor submitting a bid in response to this Request for Bids must certify and affirm the following under penalties of perjury:

- a. “By submission of this bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief, that each Bidder is not on the list created pursuant to NYS Finance Law Section 165-a (3)(b).”

Jefferson County will accept this statement electronically in accordance with the provisions of Section 103 of the General Municipal Law.

Except as otherwise specifically provided herein, any Bid that is submitted without having complied with subdivision (a) above, shall not be considered for award. In any case where the Bidder cannot make the certification as set forth in subdivision (a) above, the Bidder shall so state and shall furnish with the bid a signed statement setting forth in detail the reasons therefore. The County reserves its rights, in accordance with General Municipal Law Section 103-g to award the Bid to any Bidder who cannot make certification, on a case-by-case basis under the following circumstances.

1. The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012, and the Bidder has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
2. The County of Jefferson has made a determination that the goods or services are necessary for the County to perform its functions and that, absent such an exemption, the County of Jefferson would be unable to obtain the goods or services for which the Bid is offered. Such a determination shall be made by the County in writing and shall be a public document.

#2021h-3d – CRACK & JOINT FILLER

Attachment
Certification Pursuant to Section 103-g
of the New York State
General Municipal Law

- A. By submission of this bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each Bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the New York State Finance Law.

- B. A Bid shall not be considered for award, nor shall any award be made where the condition set forth in Paragraph A above has not been complied with; provided, however, that in any case the Bidder cannot make the foregoing certification set forth in Paragraph A above, the Bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefore. Where Paragraph A above cannot be complied with, the Purchasing Unit to the political subdivision, public department, agency or official thereof to whom the bid is made, or his designee, may award a bid, on a case by case basis under the following circumstances:
 - 1. The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012, and the Bidder has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
 - 2. The political subdivision makes a determination that the goods or services are necessary for the political subdivision to perform its functions and that, absent such an exemption, the political subdivision would be unable to obtain the goods and services for which the contract is offered. Such a determination shall be made in writing and shall be a public document.

Signature

Title

Date

Company Name