



City of Bishop, California

Bidding Information

and

Contract Documents

for

Spruce Street Fiber Seal

in the

City of Bishop, County of Inyo, California

30 August 2018

Approved:

A handwritten signature in blue ink, appearing to read 'David Grah', is positioned above the printed name.

David Grah
Director of Public Works

Notice To Bidders

Sealed proposals will be received at the City of Bishop Public Works office, City Hall, 377 West Line Street, Bishop, California, 93514 until nine o'clock (9:00) in the morning on 10 September 2018, for furnishing all labor, materials, tools, implements and machinery to do and complete all work in a manner satisfactory to the City Engineer, for the following project:

Spruce Street Fiber Seal

Together with such other incidental items as are necessary to complete the work in the manner and time prescribed and in strict conformity with the contract documents.

At 9:01 in the morning on the above date, said proposals will be publicly opened and read aloud.

All proposals shall be made using the forms furnished by the City and shall be enclosed and sealed in an envelope which is addressed to the City Council, Bishop, California, and is clearly labeled:

Bid for Spruce Street Fiber Seal

Bid books including plans, specifications, bid forms to be used for bidding on this project and other contract documents can be obtained at the City of Bishop City Hall, 377 West Line Street, Bishop, California, 93514, 760-873-8458, and publicworks@cityofbishop.com. Only bids referencing all addendums issued for the project shall be considered. To receive addendums and other information issued on the project during the advertisement period, provide your contact information to the Bishop Public Works in City Hall at the above addresses and number at least two working days prior to bid opening.

This project places fiber seal on a city street. The project includes furnishing of all labor, implements, tools, machinery, materials and all other work required to complete the project.

The estimated range for the construction cost of this phase of the project is from \$70,000 to \$90,000.

This project is funded with city funds. As a result, contracting preferences apply to this project.

Technical questions should be directed to the Director of Public Works, City of Bishop, 377 West Line Street, Bishop, California, 93514, 760-873-8458, publicworks@cityofbishop.com.

The successful bidder shall furnish all items required in the contract documents.

All proposals shall include prices for all items of work for all construction options contained in the contract documents. The City intends to award the contract to the bidder with the lowest responsive bid the City is able to fund from the allotment available for this project. Responsive bid proposals shall include:

1. Completed Bid Form

2. Bid Bond or other security
3. Completed Non-collusion Declaration form
4. Completed Contractor's Certificate Regarding Worker's Compensation form
5. Completed Proposed Equipment and Material Manufacturers form
6. Completed Proposed Subcontractors form
7. Completed Contractor Licenses form
8. If a local business preference is claimed, completed City of Bishop Local Business Verification form

The City of Bishop hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code, Section 12990.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county, or counties, in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available at City of Bishop and available from the California Department of Industrial Relations' Internet web site at <http://www.dir.ca.gov/DLSR/PWD>. Future effective general prevailing wage rates, which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the general prevailing wage rates.

The Contractor shall procure all required permits and licenses, pay all charges, fees and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the work.

The City Council of the City of Bishop, California, reserves the right to reject any and all proposals and to waive any formalities in the proposal.

Bid Form

Proposal to City of Bishop for the construction of

Spruce Street Fiber Seal

Bidder Information:

Name: _____

Address: _____

Phone: _____

Email: _____

To the Bishop City Council:

Pursuant to and in compliance with your Notice to Bidders inviting sealed proposals (bids) and the other documents relating thereto, the undersigned bidder, being fully familiar with the terms of the contract documents, local conditions affecting the performance of the contract, the character, quality, quantities, and scope of work, and the cost of the work at the place where the work is to be done, hereby proposes and agrees to perform within the time stipulated in the contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, material, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the contract and complete in a workman like manner, all of the work required in connection with the construction of said work all in strict conformity with the plans and specifications and other contract documents, including Addenda _____, _____, _____, and _____, for the prices hereinafter set forth.

The bidder, under penalty of perjury, certifies that, except as noted on an attached page, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, and manager: Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; Has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years; Does not have a proposed debarment pending; and Has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years. If there are any exceptions to this certification, insert the exceptions on an attached page.

The undersigned as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein and that this proposal is made without collusion with any person, firm, or corporation; and he proposes and agrees, if the proposal is accepted, that he will execute a contract with the City in the form set forth in the contract documents and that he will accept in full payment thereof the unit prices on the following page.

Item	Quantity	Unit	Description	Unit Price	Total Item Price
1	1	LS	Traffic Control		
2	99,405	SF	Fiber Seal		
				Total Bid	

CY is cubic yard; EA is each; LF is linear foot; LS is lump sum; SF is square foot

Check one and provide required information:

- No contracting preference is claimed
- California Small Business contracting preference is claimed
- Local business contracting preference is claimed
- Small business subcontracting preference is claimed

In the event the total amount for an individual bid item does not agree with the product of the estimated quantity and unit price bid for that item, the unit price stated for the individual item shall govern and the incorrect total amount for that item shall be corrected. In the event the Total Bid does not agree with the sum of the total amounts bid for the respective bid items, the total amounts for the respective bid items shall govern and the incorrect Total Bid shall be corrected.

Unit prices for all items, extensions and total amount of bid must be shown. The proposal submitted shall be in effect for 30 days after the opening of bids.

Accompanying this proposal is a deposit in the form of a _____ (Insert words "certified check", "cashier's check", "bid bond", "cash", or appropriate description of substitute security, as the case may be) in the amount of \$_____ which amount is not less than 10% of the total bid, payable to the CITY OF BISHOP.

The undersigned deposits the above-named security as a proposal guarantee and agrees that it shall be forfeited to the City in case this proposal is accepted by the City and the undersigned fails to execute a contract with the City as specified in the contract documents or fails to furnish the required payment and performance bonds, or substitute, and insurance certificates and endorsements. Should the City be required to engage the services of an attorney in connection with the enforcement of this bid, bidder promises to pay City's reasonable attorneys' fees, incurred with or without suit.

The names of all persons interested in the foregoing proposals as principals are as follows. If bidder is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a general partnership, state true name of firm, also names of all individual partners composing firm; if a limited partnership, the names of all general partners and limited partners; if an individual, state first and last names in full; if the bidder is a joint venture, state the complete name of each party.

Authorized Bidder Representative:

Name (typed or printed): _____ (SEAL)

By: _____
(Individual's signature – attach evidence of authority to sign)

Title: _____

Bid Bond

(10% of Total Bid Amount)

We, _____ as Principal,
and _____ as Surety,
jointly and severally, bind ourselves, our heirs, representatives, successors and assigns, as set forth herein to the

City of Bishop, California

(herein called City) for payment of the penal sum of _____
_____ Dollars (\$ _____), lawful money of the United
States. Principal has submitted the accompanying bid for the construction of

Spruce Street Fiber Seal

If the Principal is awarded the contract and enters into a written contract, in the form prescribed by the City, at the price designated by his bid, and files two bonds with the City, or substitute security in lieu thereof, one to guarantee payment for labor and materials and the other to guarantee faithful performance, in the time and manner specified by the City, and carries all insurance in type and amount which conforms to the contract documents, and furnishes required certificates and endorsements thereof, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Forfeiture of this bond, or any deposit made in lieu thereof, shall not preclude the City from seeking all other remedies provided by law to cover losses sustained as a result of the Principal's failure to do any of the foregoing.

Principal and Surety agree that if the City is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay City's reasonable attorney's fees incurred with or without suit.

Executed on _____

PRINCIPAL

(Seal of Corporation)

By _____

Title _____

(Attach Acknowledgment of Authorized Representative of Principal)

Any claims under this bond may be addressed to:

_____ (Name and address of Surety)

_____ (Name and address of Surety's agent for service of
process in California, if different from above)

_____ (Telephone number of Surety's agent in California)

(Attach Acknowledgement)

_____ SURETY

By _____
(Attorney-in-Fact)

Non-collusion Declaration

The undersigned declares:

I am the _____
of _____,

the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on

Date _____ at

City, State _____

Signature _____

Printed Name _____

Contractor's Certificate Regarding Worker's Compensation

Description of Contract: City of Bishop **Spruce Street Fiber Seal**

Labor Code Section 3700 Provides (in part):

“Every employer except the State shall secure the payment of compensation in one or more of the following ways:

- A. By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.

- B. By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.”

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

Dated: _____
_____ (Contractor)

By _____
_____ (Official Title)

Contractor Licenses

The Contractor’s license classifications required for this project are as follows:

Class C12 – Earthwork and Paving Contractors

These classifications are provided for information purposes only. The Engineer does not warrant that all classifications required for the project are listed.

It is the City’s intent that “plans,” as used in Public Contract Code Section 3300, is defined as the construction contract documents, which include both drawings and specifications.

The contractor hereby confirms that it has all licenses and permits required by federal, state, and local statutes, regulations, and ordinances. The following are the Contractor’s applicable license numbers:

<u>Contractor’s License and Public Works Contractor Registration Numbers</u>	<u>Expiration Dates</u>
_____	_____
_____	_____
_____	_____
_____	_____

I state under penalty of perjury that all information submitted by me and included in this contract is true and correct.

Signature of Bidder: _____

Dated: _____

City of Bishop Local Business Verification

Complete and submit this form to claim Local Business status pursuant to Chapter 3.26, Contracting Preferences, of the Bishop Municipal Code.

Business: _____

Contact: _____

Telephone: _____

Email: _____

Bid or Project: _____

1. Business Location: Provide street addresses or locations of your business for the past six months. Indicate if headquarters, distribution point, or locally-owned franchise.

Addresses or Locations	Headquarters, Distribution Point, or Franchise
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2. Business License: Provide issuing jurisdiction and number of local business license and attach a copy. Indicate if no license is required.

Jurisdiction	License number
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3. Business Employment: Provide the name and street address of one full-time employee or names and street addresses of two part-time employees employed by your business. If your business has no employees, provide the names and street addresses of local business owners that own 50% or larger share of business.

	Name 1	Name 2
Name:	_____	_____
Street:	_____	_____
City, State, ZIP:	_____	_____
Full, Part Time, or Share:	_____	_____

Certification: I acknowledge I have read and understand the criteria for contracting preferences as defined under Chapter 3.26 of the Bishop Municipal Code. I swear and affirm under penalty of perjury that the above information is true and correct and that the business listed above is qualified and eligible to receive a local preference. Bishop Municipal Code available at www.cityofbishop.com or at City Hall.

Signature	Title	Date
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Agreement

THIS AGREEMENT, made and entered into by and between the

City of Bishop, California

hereinafter referred to as “CITY” and

a corporation under the laws of the state of _____;

hereinafter referred to as “CONTRACTOR”.

CITY and CONTRACTOR agree as follows:

1. SCOPE OF WORK: Contractor shall furnish all materials and shall perform all of the work for the construction of the Spruce Street Fiber Seal in accordance with this agreement and the other contract documents.
2. TIME FOR COMPLETION: The work shall be completed within the times set forth in the contract documents. Time is of the essence and forfeiture due to delay will be assessed as provided for in the contract documents.
3. CONTRACT SUM: CITY will pay CONTRACTOR as described in the Contractor bid and the rest of the contract documents.
4. PAYMENTS: Payment will be made in accordance with the contract documents. The filing of the notice of completion by CITY shall be preceded by acceptance of the work made only by an action of the City Council.
5. COMPLIANCE WITH PUBLIC CONTRACTS LAW: CITY is a public agency in the State of California and is subject to the provisions of law relating to public contracts. It is agreed that all provisions of law applicable to public contracts are a part of this contract to the same extent as though set forth herein and will be complied with by CONTRACTOR.
6. CONTRACT DOCUMENTS: The complete contract includes all of these documents:
 - Notice to Bidders
 - Bid Form
 - Agreement
 - Payment Bond

- Worker’s Compensation Certificate
- Special Provisions
- Other referenced documents

This Agreement is executed by the CITY pursuant to an action of its Governing Body in session on _____, authorizing the same, and CONTRACTOR has caused this Agreement to be duly executed.

Dated:

_____ By _____
City Administrator

Dated:

_____ By _____
(Contractor)

Title:

APPROVED AS TO FORM:

City Attorney

Payment Bond

(100% of the Agreement Amount)

We, _____ as Principal,

and _____ as Surety,
jointly and severally, bind ourselves, our heirs, representatives, successors and assigns, as set forth herein to the

City of Bishop

(herein called City) for payment of the penal sum of _____

_____ Dollars (\$ _____), lawful money of the United States. City has awarded Principal a contract for the construction of

Spruce Street Fiber Seal

If Principal or any of his subcontractors fails to pay any of the persons named in Section 3181 of the California Civil Code, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract or during the one-year guarantee period, or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax board from the wages of employees of the contractor and his subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, then Surety will pay the same in an amount not exceeding the sum specified above, and also will pay, in case suit is brought upon this bond, such reasonable attorney's fees as shall be fixed by the court.

This bond shall insure to the benefit of any of the persons named in Section 3181 of the California Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Surety agrees that no change, extension of time, alteration, or addition to the terms of the contract, or the work to be performed there under, or the plans and specifications shall in any way affect its obligation on this bond, and it does hereby waive notice thereof.

Principal and Surety agree that if the City is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay City's reasonable attorney's fees incurred with or without suit, in addition to above sum.

Executed in two original counterparts on _____, 20__

PRINCIPAL

(Seal of Corporation)

By _____

Title _____

Any claims under this bond may be addressed to:

(Name and address of Surety)

(Name and address of Surety's agent for
service of process in California, if different
from above)

(Telephone number of Surety's agent in
California)

(Attach Acknowledgement)

SURETY

By _____
(Attorney-in-Fact)

APPROVED:

(Attorney for CITY)

Special Provisions

A. GENERAL PROVISIONS

1. GENERAL

Unless otherwise stated, the work embraced herein shall be done in accordance with the 2015 Standard Specifications and the Standard Plans of the State of California, Department of Transportation insofar as the same may apply and in accordance with these Special Provisions. Copies of the Standard Plans and the Standard Specifications may be obtained from the Department of Transportation. In addition the City of Bishop Specifications for Domestic Water and Sanitary Sewer System (1991) shall also apply. Copies may be obtained from the City of Bishop Public Works Department.

When approved by the Engineer, forms, documents, and standards equivalent to those specified may be used.

In the event of conflict between these Special Provisions, the project plans, the City of Bishop Specifications for Domestic Water and Sanitary Sewer System, the Standard Specifications, and the Standard Plans the order of precedent shall be these Special Provisions over the project plans over the technical specifications of the City of Bishop Specifications for Domestic Water and Sanitary Sewer System over the Standard Specifications over the remaining sections of the City of Bishop Specifications for Domestic Water and Sanitary Sewer System over the Standard Plans.

2. GLOSSARY

All definitions and terms in Section 1-1.07B, Glossary, of the Standard Specifications shall apply, except whenever the following terms are used the intent and meaning shall be as follows.

Bid Item List: The bid form corrected for math errors.

Contract: Executed agreement between the City and Contractor.

Contract Documents: The documents which make up the Contract, including any and all documents incorporated therein; also, any and all written agreements between the City and Contractor which amend or change the Contract. Referred to as the Bid Book in the Standard Specifications.

City: The City of Bishop, State of California, working through its Public Works Department.

Department: The Public Works Department of the City of Bishop.

Director: The Public Works Director of the City of Bishop.

Department of Transportation: The Public Works Department of the City of Bishop, except when Department of Transportation publications are cited, such cites are to remain as written and refer to the State of California, Department of Transportation, also known as Caltrans.

Engineer: The Public Works Director of the City of Bishop, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.

Laboratory: The Laboratory of the Public Works Department or other laboratories authorized by the Public Works Department of the City of Bishop to test materials and work involved in the Contract.

Office Engineer: The Public Works Director of the City of Bishop.

Owner: The City.

State or State of California: The City except when State publications or standards are cited, such cites are to remain as written and refer to the State of California.

3. CHANGES TO STANDARD SPECIFICATIONS

The following sections are deleted from the Standard Specifications:

2-1.02, Bid Ineligibility

2-1.06, Bid Documents

2-1.18, Small Business and Non-Small Business Subcontractor Preferences

2-1.27, California Companies

2-1.33D, Opt Out of Payment Adjustments for Price Index Fluctuations

3-1.08, Small Business Participation Report

3-1.11, Payee Data Record,

Delete the numbered list in Section 3-1.18, Contract Execution

Deleted the second and third paragraphs of Section 2-1.33A, Bid Document Completion - General.

Modify Section 5-1.23, Submittals, to identify each sheet by the project name.

Delete the column "Umbrella or excess liability" from Liability Limits table of Section 7-1.06D(2), Liability Limits / Additional Insureds.

4. PROPOSAL REQUIREMENTS

The bidder's attention is directed to the provisions in Section 2, Bidding, of the Standard Specifications and these special provisions for the requirements and conditions which the bidder must observe in the preparation and the submission of the bid. Subcontracting Request forms are not required but each proposal shall list the portion of work that will be done by each subcontractor. A sheet for listing the subcontractors is included in the Proposal.

The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract.

5. BONDS

The Contractor, simultaneously with the execution of the contract, shall furnish a payment bond in an amount equal to 100 percent of the contract amount, or equivalent cash or security in lieu of bonds pursuant to Section 995.710 of the Code of Civil Procedures. Bonds shall be

furnished by surety companies satisfactory to the City on the forms furnished as part of the contract documents. Surety companies, to be acceptable to the City, must be authorized to do business and have an agent for service of process in California.

6. SCOPE OF WORK

The scope of the work shall consist of the reconstruction of a sewer trunk as described in the contract documents for the **Spruce Street Fiber Seal** and as provided in the improvement plans.

7. PRE-CONSTRUCTION CONFERENCE

Prior to issuance to the Notice to Proceed, the City will hold a pre-construction conference for the purpose of discussing essential matters pertaining to the pursuit of the satisfactory completion of the project. The Contractor's representatives at this conference shall include all major superintendents for the work and may include subcontractors.

8. SUBMITTALS

In addition to submittals required in the Standard Specifications and elsewhere in these Special Provisions, the Contractor shall submit the following information to the City 7 working days prior to beginning of work for review and approval.

- a) A schedule of work conforming to Section 8-1.02B, Level 1 Critical Path Model Schedule, of the Standard Specifications.
- b) A health and safety plan.
- c) Traffic Control Plan
- d) Certificates of Compliance

Each submittal shall include a cover sheet clearly describing the purpose of the submittal and containing a statement that the contractor each page of submittals shall include a statement the contractor has examined and verified all field dimensions and measurements, field construction criteria, materials, and similar data, and they meet the requirements for the project. Submittals shall provide sufficient information to determine that the item is in compliance with the requirements.

9. PERMITS AND LICENSES

The following permits and licenses are known to be required for the work:

- a) City of Bishop Business License and
- b) California Contractors License Classification Class C12 – Earthwork and Paving Contractors

10. TIME OF COMPLETION

The Contractor shall have 15 working days to complete the work.

11. LIQUIDATED DAMAGES

Liquidated damages shall be \$500 per day.

12. MEASUREMENT AND PAYMENT

All work will be measured and paid for as shown on the bid form and the contract documents.

Item quantities shall be measured by planned, actual, or lump sum in accordance with these special provisions. Item quantities to be measured for payment by planned quantities shall be based on theoretical or calculated quantities of completed work based on the plans. Item quantities to be measured for payment by actual quantities shall be determined by measurement of completed work.

The price paid for bid items shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in completing those items of work complete in place in accordance with the contract documents.

When the contract does not include a contract pay item for work required by the contract, full compensation for that work is included in the prices paid for the contract pay items included in the contract.

The Contractor with assistance from the City shall, on or before the tenth day of each calendar month after construction work is started, cause an estimate in writing to be made of the value of the work completed.

A request for payment shall be submitted by the Contractor each month and upon completion of all work for approval and payment by the City.

The City shall retain 10 percent of the estimated value of the work done and 10 percent of the value of materials so estimated to have been furnished and delivered and unused or furnished and stored as aforesaid as part security for the fulfillment of the contract by the Contractor, except that at any time after 20 percent of the work has been completed, if the Engineer finds that satisfactory progress is being made, the City may reduce the total amount being retained from payment pursuant to the above requirements to 5 percent of the estimated value of the work and materials and may also reduce the amount retained from any of the remaining partial payments to 5 percent of the estimated value of the work and materials. In addition, on any partial payment made after 95 percent of the work has been completed, the Department may reduce the amount withheld from payment pursuant to the requirements of this section to such lesser amount as the Department determines is adequate security for the fulfillment of the balance of the work and other requirements of the contract, but in no event will that amount be reduced to less than 125 percent of the estimated value of the work yet to be completed as determined by the Engineer.

Attention is directed to the provisions in Sections 10262 and 10262.5 of the Public Contract Code concerning prompt payment to subcontractors.

13. RESOLUTION OF CLAIMS

All public works claims between the Contractor and City relating to this contract where the total claims of both parties are equal or less than \$375,000 shall be resolved in accordance with Public Contract Sections 20104 et seq., which are incorporated herein by reference. There shall be no claims for labor compliance issues.

14. GENERAL SAFETY

Contractor shall transmit to the City copies of reports and other documents related to accidents and injuries encountered during this work. Where there is conflict between applicable safety orders, laws and regulations and policies, the more stringent measures shall apply.

15. CHEMICALS

The Contractor shall provide two copies of Material Safety Data Sheets to the City for all chemicals used during this project at least three days prior to bringing them on site. Use of all such chemicals and disposal of residues shall be in strict accordance with the printed instructions of the manufacturer.

If the Contractor encounters hazardous substances during this work, he shall immediately notify the City and the County Environmental Services Office. Hazardous substances shall be disposed of in accordance with the requirements of Inyo County Department of Environmental Health.

B. BID ITEMS

1. Traffic Control

Traffic Control shall consist of the development, implementation, and maintenance of a traffic control plan for the work. Traffic control shall be measured lump sum and paid based on percentage of contract time expired.

The contractor's traffic control plan shall include, but not be limited to, the following:

- Construction signing
- Types and location of traffic control devices
- Draft notification letters

The plan shall conform to the California Manual of Uniform Traffic Control Devices.

The City Engineer will review the submittal and provide written comments on the proposed plan. Upon resolution of issues the Engineer shall accept the plan in writing.

Acceptance by the Engineer of a traffic control plan shall in no way relieve the Contractor of his responsibility for safety. Acceptance of the traffic control plan by the City Engineer indicates that the plan generally appears to conform to the contract requirements. Such acceptance shall in no way be construed as confirmation of the technical accuracy or adequacy of the contents of the plan and shall not relieve the Contractor of the obligation to institute traffic control measures in full compliance with contract requirements, and which function safely and correctly, and are in conformance with applicable statutes, ordinances, and regulations.

Notifications: Draft notifications to properties shall be submitted to the Engineer for review and approval before Contractor distributes notices. The Contractor shall submit a copy to the Engineer of all notifications delivered.

The Contractor shall prepare and deliver project information notices to all properties adjacent to the project to ensure properties receive the notices no less than 7 calendar days prior to beginning any construction. The notice will include:

- Impacts of construction to property
- General scope of project including description of project and limits, hours and days of operation, phasing information, lane closure, and parking restrictions
- Contractor contact and telephone number
- Other appropriate information requested by the Engineer.

When temporary full-street and driveway closures are necessary for vehicles, the Contractor shall notify the affected properties 3 working days prior to each closure event.

Flagging: Flagging shall be paid entirely by the contractor. Assigned flaggers must control traffic and warn public of any dangerous conditions results from work activities. All flaggers must maintain flagging apparel. Flaggers shall be used during active construction operations whenever one-way traffic control is used on a two-way street.

Phasing and Access Requirements: Streets may only be closed when construction operations are underway. Construction operations are considered to be underway when seal is curing and not yet ready for traffic. Except at isolated locations, at least two smooth firm lanes at least 11 feet wide shall be open on all two way streets when construction operations are not underway. At isolated locations at least one smooth firm lane at least 11 feet wide shall be open when construction operations are not underway.

The contractor shall make special effort to communicate and coordinate closures with the shopping center and Caltrans facilities along Spruce Street.

2. Fiber Seal

Fiber Seal shall consist of mixing a polymer modified cationic quickset emulsion, glass fibers, black volcanic aggregate, portland cement, mineral filler, set-control additives, and water and spreading the mixture in a single layer on the pavement surface. The seal coats will from edge of concrete gutter to edge of concrete gutter or to edge of pavement. The seal coat application will be applied in a smooth and continuous manner with matching seams. All manhole lids, water valve lids and survey markers will be protected from the slurry seal application. Fiber Seal shall be measured actual.

In lieu of on-site testing, the materials used in the fiber seal may be covered by certificates of compliance.

Fiber Seal Mix Design: At least 7 working days before the fiber seal placement commences, the contractor shall submit a proposed mix design for approval of the Engineer. The submittal shall include laboratory report covering the specific materials proposed for use on the project. The percentages of each individual material proposed in the mix design shall be shown in the laboratory report. Individual materials shall be within the following limits:

Residual Asphalt	5.5% to 10.5% by dry weight of aggregate
Mineral Filler	0.5% to 3% by dry weight of aggregate
Glass Fiber	Top Lift: 0.05% to 0.30% by dry weight of aggregate
Additive and Water	As needed

Adjustments may be required during construction based on field conditions.

Test	ISSA Test Method	Requirements
Wet Cohesion @ 30 Minute (Set) (Min.) @ 60 Minute (Traffic) (Min.)	TB*139	12 kg-cm 20 kg-cm
Excess Asphalt	TB*109	540 g/m ²
Wet Stripping (Min.)	TB*114	90%
Wet Track Abrasion 6-day Soak Loss (Max.)	TB*100	810g/m ²

Displacement Lateral (Max.) Specific Gravity After 1000 Cycles of 125 lbs. (56.8 kg) (Max.)	TB*147A	5% 2.10
Classification Compatibility	TB*144	(AAA, BAA) 11 Grade Points
Mix Time @ 77°F (25°C)	TB*113	Controllable to 120 Seconds
TB* = Technical Bulletin		

The mix design and aggregate tests shall be performed by a laboratory capable of performing the applicable International Slurry Surfacing Association (ISSA) tests, shall be AMRL certified, or participate in the AASHTO Proficiency Program.

The results of tests on individual materials shall be compared to the required values in a report. The report shall clearly show the proportions of aggregate, fiber, filler (minimum and maximum), water (minimum and maximum), set control additive, and PMCQS-1h solids content (minimum and maximum) based on the dry weight of aggregate.

The laboratory shall report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect) in conformance with the requirements of ASTM Designation C 29M. Previous laboratory reports covering the same materials may be accepted provided the material test reports were completed within the previous 12 months.

The component materials used in the mix design shall be representative of the fiber seal materials proposed by the Contractor for use on the project.

Once the mix design is approved by the Engineer, no substitution of other material will be permitted unless the materials proposed for substitution are first tested and a laboratory report is submitted for the substituted design in conformance with the provisions of these special provisions. Substituted materials shall not be used until the mix design for those materials has been approved by the Engineer.

The completed mixture, after addition of water and set control agent, if used, shall be such that the fiber seal mixture has proper workability. At the expiration of the road closure hours the fiber seal mixture shall be sufficiently cured to support unrestricted traffic.

Fiber Seal Proportioning: Aggregate, mineral filler, PMCQS-1h, fiber, water, and additives, including the set-control agent, if used, shall be proportioned by volume utilizing the mix design approved by the Engineer. If more than one kind of aggregate is used, the correct amount of each kind of aggregate to produce the required grading shall be proportioned separately, prior to adding the other materials of the mixture, in a manner that will result in a uniform and homogeneous blend.

The aggregate shall be proportioned using a belt feeder operated with an adjustable cut off gate. The height of the gate opening shall be determinable. The PMCQS-1h shall be proportioned by a positive displacement pump. Variable rate emulsion pumps, if used, shall be calibrated and sealed in the pump's calibrated condition in conformance with the ISSA Inspector's Manual MA-1 prior to usage.

The delivery rate of aggregate and PMCQS-1h per revolution of the aggregate feeder shall be calibrated at the appropriate gate settings for each mixer-spreader truck used on the project in conformance with ISSA Inspector's Manual MA-1 and in conformance with the provisions of these special provisions.

The aggregate belt feeder shall deliver aggregate to the pug-mill with such volumetric consistency that the deviation for any individual aggregate delivery rate check-run shall not exceed 2.0 percent of the mathematical average of 3 runs of at least three tons each. The emulsion pump shall deliver PMCQS-1h to the pug-mill with such volumetric consistency that the deviation for any individual delivery rate check-run shall be within 2.0 percent of the mathematical average of 3 runs of at least 300 gallons each. The water pump shall deliver water to the pug-mill with such volumetric consistency that the deviation for any individual delivery rate check-run shall be within 2.0 percent of the mathematical average of 3 runs of at least 300 gallons each.

The PMCQS-1h storage tank shall be located immediately before the emulsion pump and shall be equipped with a device which will automatically shut down the power to the emulsion pump and aggregate belt feeder when the PMCQS-1h level is lowered to a point where the pump suction line is exposed.

A temperature-indicating device shall be installed in the emulsion storage tank at the pump suction level. The device shall indicate the temperature of the PMCQS-1h and shall be accurate to within 10°F.

The fiber shall be added at a rate of 0.05 to 0.40% by weight of dry aggregate. The mixer-spreader trucks shall be equipped with a fiber chopper, fiber storage and control systems for injecting fibers into the micro surfacing mix. It shall be capable of providing up to 7 pounds per minute of fiber injection. The chopper shall cut from 3 to 4 bobbins of fiber into 3/8 +/- 1/8 inch long pieces and feed them into the aggregate as it enters the inlet hopper. The system shall turn on and off with the main start of the mixer-spreader truck. The system shall be powered by the main hydraulic system of the mixer-spreader truck. The mixer-spreader truck shall be capable of providing 3-5 cubic feet per minute of air from the truck air compressor for nozzle cooling and chopper flushing. The mixer-spreader truck shall include an enclosure/mounting and feed system for up to 4 bobbins of fiber roving.

The belt delivering the aggregate to the pug-mill shall be equipped with a device to monitor the depth of aggregate being delivered to the pug-mill. The device for monitoring the depth of aggregate shall automatically shut down the power to the aggregate belt feeder whenever the depth of aggregate is less than the target depth of flow. A second device shall be located where the device will monitor the movement of the aggregate belt by detecting revolutions of the belt feeder. The devices for monitoring no flow or belt movement shall automatically shut down the power to the aggregate belt when the aggregate belt movement is interrupted. The device to detect revolutions of the belt feeder will not be required where the aggregate delivery belt is an integral part of the drive chain. To avoid erroneous shutdown by normal

fluctuation, a delay of 3 seconds will be permitted between sensing and shutdown of the operation.

Fiber Seal Mixing and Spreading Equipment: The fiber seal shall be mixed in continuous pug-mill mixers of adequate size and power for the type of fiber seal to be placed. All indicators shall be in conformance with the provisions of these special provisions and shall be in working order prior to commencing mixing and spreading operations.

There shall be a minimum of three mixer-spreader trucks on job site during hours of construction. All mixer-spreader trucks shall be equipped to proportion the PMCQS-1h, water, aggregate, mineral filler, and set-control additives by volume. Rotating and reciprocating equipment on mixer-spreader trucks shall be covered with metal guards.

The mixer-spreader truck shall not be operated unless low-flow and no-flow devices and revolution counters are in good working condition and functioning and metal guards are in place. Indicators required by these special provisions shall be visible while walking alongside the mixer-spreader truck.

Aggregate feeders shall be connected directly to the drive on the emulsion pump. The drive shaft of the aggregate feeder shall be equipped with a revolution counter reading to the nearest one-tenth of a revolution.

In addition to the requirements of the fourth paragraph of Section 5 1.10, "Equipment and Plants," of the Standard Specifications, the identifying number of mixer-spreader trucks shall be at least three inches in height, located on the front and rear of the vehicle.

The fiber seal mixture shall be spread by means of a spreader box conforming to the requirements in the "Spreader Box" section of these specifications.

Fiber Seal Spreader Box: The spreader box shall be capable of spreading a lane width and equipped with a material such as flexible rubber belting on each side and in contact with the pavement. The spreader box shall be equipped with rear flexible strike-off blades making close contact with the pavement and adjustable to various crown shapes in order to apply a uniform micro surfacing. The spreader box shall be equipped with flexible drags attached to the rear and cleaned daily and changed if longitudinal scouring occurs. The spreader box shall be clean and free of excess micro surfacing and/or PMCQS-1h at the start of each work shift.

Fiber Seal Preparation: Before placing the fiber seal, the pavement surface shall be cleaned by sweeping, flushing or by other means necessary to remove loose particles of paving, dirt, and other extraneous material. When required, the roadway surface may be fogged with water ahead of the spreader box. The application of the fog spray may be adjusted to suit temperatures, surface texture, humidity and dryness of pavement.

A tack coat of asphaltic emulsion shall be applied to all Portland cement concrete surfaces when there is a contract item for the work or when the work is required in these special

provisions. The asphaltic emulsion for tack coat shall be grade SS-1, SS-1h, CSS-1 or CSS-1h and shall conform to the provisions in Section 94, "Asphaltic Emulsions," of the Standard Specifications. The asphaltic emulsion shall be mixed in the proportion of one part of emulsion (which contains up to 43 percent water) to 3 parts water. The mixture shall be applied at the approximate rate of 0.04 – 0.08 gal/yd². When asphaltic emulsion is used as a tack coat, fiber seal shall not be placed until the asphaltic emulsion has cured.

Contractor is not responsible for removal of thermoplastic, pavement repairs such as filling cracks and pot holes, sweeping after placement of seal, striping, and tree trimming.

Fiber Seal Placing: The fiber seal mixture shall be uniformly spread on the existing surface within the rate specified without spotting, rehandling or otherwise shifting of the mixture. The fiber seal mixture shall not be placed when the ambient temperature is below 50 °F or during unsuitable weather. Fiber seal shall not be placed if rain is imminent or if there is the possibility that there will be freezing temperatures within 24 hours.

Fiber seal shall be spread at between 14 and 16 pounds of aggregate per square yard.

Longitudinal joints shall correspond with the edges of the traffic lanes. The Engineer may permit other patterns of longitudinal joints if the patterns will not adversely affect the quality of the finished product.

Through traffic lanes shall be spread in full lane widths only. Longitudinal joints common to 2 traffic lanes shall not overlap more than 3 inches. Building paper shall be placed at the transverse joints to avoid double placement of the fiber seal. Other suitable methods to avoid double placement of the fiber seal will be allowed. Hand tools shall be available to remove spillage.

The mixture shall be uniform and homogeneous after placing on the surfacing and shall not show separation of the PMCQS-1h and aggregate after setting. The completed surface shall be of uniform texture and free from ruts, humps, depressions, or irregularities.

Adequate means shall be provided to protect the fiber seal from damage by traffic until such time that the mixture has cured sufficiently so that the fiber seal will not adhere to or be picked up by the tires of vehicles.

After the initial break of the fiber seal and within a minimum of 2 hours after placement the fiber seal shall be rolled with a pneumatic tire roller or 1.5 ton steel wheel roller meeting the following requirements:

1. 9.3 tons minimum weight (pneumatic), 1.5 tons maximum (steel wheel)
2. The pneumatic roller shall be equipped with 7 total wheels, 4 in the rear and 3 in the front of the roller.

The roller shall make a minimum of three passes on the surface.

Fiber Seal shall be traffic ready within 60 minutes of being applied to roadway surface. The term “Traffic Ready” means allowing uncontrolled traffic on the roadway surface.

Placement of the fiber seal shall cease a minimum of one hour before the expiration of the road closure hours as specified in “Maintaining Traffic” of these special provisions, unless the Contractor proves to the satisfaction of the Engineer that the surface will be ready for unrestricted traffic at the expiration of the road closure hours.

Fiber Seal Repair of Early Distress: If bleeding, raveling, delamination, rutting, or wash boarding occurs within 60 days after placing the fiber seal, the Contractor shall diligently pursue repairs by any method approved by the Engineer. The Contractor shall not be relieved from maintenance until repairs have been completed.

A. MATERIALS

1. Emulsion

The asphalt emulsion shall be a homogenous polymer modified cationic quickset (PMCQS-1h). The polymer shall be milled or blended into the asphalt or blended into the emulsifier solution prior to the emulsification process. Polymer solids must be a minimum of 3.0 % by weight of the emulsion's residual asphalt. Provide a certificate of compliance certifying the amount of polymer.

The PMCQS-1h emulsion shall conform to the following requirements when tested in conformance with the following test methods:

Polymer Modified, Cationic Quickset Emulsion		
Specifications Designation	Test Method	Requirement
Viscosity SSF @ 77°F (25°C)	AASHTO T59	15-90 Seconds
Sieve, max.	AASHTO T59	0.30 Percent
Settlement, 5 days, max.*	ASTM D 244	5 Percent
Residue by Evaporation, min.	AASHTO T59	62 Percent
*Waived if to be used within 48 hours of manufacture		

Specification Designation for Residue		
Specifications Designation	Test Method	Requirement
Penetration (@ 77°F (25°C), 100g, 5s, 0.1mm)	AASHTO T 51	40-90
Softening Point °F (°C) min.	AASHTO T 53	135 (57)
Torsional Recovery min.	California Test 332	20

2. Fiber

The fiber used in the fiber seal shall be RoadChem Fiber 1 or equivalent chemical resistant glass fiber meeting the following requirements:

Alkali and Acid Resistant Glass Fiber					
Linear Weight of Roving (tex) ISO 1889	Linear Weight of Strand (tex) ISO 1889	Moisture Content (%) ISO 3344	Specific Gravity	Softening Point (°C)	Tensile Strength
2500 min.	82 min.	0.35 max.	2.68 g/cm ³	860 min.	1700 min.
4800 min.	100 min.				

3. Water and Additives

The water shall be potable and free of harmful soluble salts or reactive chemicals and other contaminants. If necessary for workability, a set-control agent may be used and must be included as part of the mix design and be compatible with the other components of the mix. Water is available from the City of Bishop fill stem at the intersection of South Fowler Street and West South Street.

4. Mineral Filler

Mineral filler shall be Portland cement or hydrated lime that is free of lumps. The type of mineral filler shall be determined by the Contractor based on laboratory mix designs and will be considered part of the aggregate gradation.

5. Aggregate

The mineral aggregate used shall be black volcanic with a durability rating of 70 to ensure a black road for the life of the fiber seal. Aggregate shall consist of sound, durable, crushed stone or crushed gravel and approved mineral filler. The material shall be free from vegetable matter and other deleterious substances. All aggregate shall be free of caked lumps and oversize particles.

If aggregates are blended each component aggregate shall meet the sand equivalency and abrasion resistance and shall be 100% crushed.

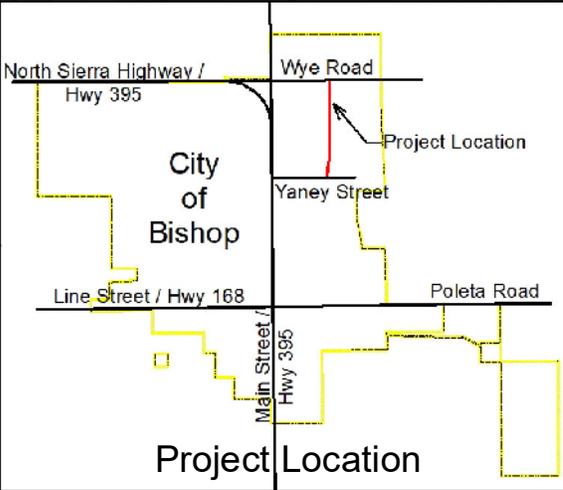
The percentage composition by weight of the aggregate (including mineral filler) shall conform to the following grading requirements when tested in conformance with AASHTO T 27 and AASHTO T 11:

Sieve Size	Percentage Passing
3/8"	100
No. 4	94-100
No. 8	65-90
No. 16	40-70
No. 30	25-50
No. 200	5-15

Aggregate (including mineral filler) shall conform to the following:

TEST	TEST METHOD	REQUIREMENTS
Sand Equivalent (Min.)	AASHTO T 176	65
Durability Index (Min.)	AASHTO T 210	70
Percentage of Crushed Particles (Min.)	ASTM D 5821	100%
Loss Angeles Rattler Loss at 500 Rev. (Max.) ¹	AASHTO T 96	35%

Notes: 1. Los Angeles Rattler shall be performed on the parent aggregate before crushing



[Signature]
 30 August 2018
 Director of Public Works



City of Bishop
 Spruce Street Fiber Seal Plan