

**CONTRACT MA-080-15011910
FOR
ASPHALT CONCRETE PAVEMENT MAINTENANCE SERVICES**

THIS Contract, number MA-080-15011910, for Asphalt Concrete Pavement Maintenance Services, (hereinafter referred to as "Contract") is made and entered into as of the date fully executed by and between the County of Orange, a political subdivision of the State of California, (hereinafter referred to as "County"), and Ben's Asphalt, Incorporated, a State of California corporation (hereinafter referred to as "Contractor"); with County and Contractor sometimes individually referred to as ("Party"), or collectively referred to as ("Parties").

RECITALS

WHEREAS, County and Contractor are entering into this Contract for Asphalt Concrete Pavement Maintenance Services under a Usage Contract; and,

WHEREAS, County solicited for Asphalt Concrete Pavement Maintenance Services as set forth herein, and Contractor has represented that it is qualified to provide Asphalt Concrete Pavement Maintenance Services to County as further set forth herein; and,

WHEREAS, Contractor agrees to provide Asphalt Concrete Pavement Maintenance Services as further set forth in the Scope of Work, attached hereto as Attachment A and incorporated herein; and,

WHEREAS, County agrees to pay Contractor the fees as further set forth in Contractor's Pricing, attached hereto as Attachment B and incorporated herein;

NOW THEREFORE, the Parties mutually agree as follows:

ARTICLES

1. **Scope of Contract:** This Contract, including attachment(s), specifies the contractual terms and conditions by which Contractor will provide Asphalt Concrete Pavement Maintenance Services under a Usage Contract.
2. ~~**Term:** The initial term of this Contract shall become effective upon execution of all necessary signatures, and shall continue for one (1) year from that date unless otherwise terminated as provided herein. This Contract may be renewed upon expiration for four (4) additional years, upon mutual agreement of both Parties. County is not obligated to give a reason or notice if it elects not to renew. Renewal amendments may require approval of the County Board of Supervisors.~~

AMENDMENT 1

- ~~2. **Term:** Contract shall be effective on July 1, 2016 and shall continue for one (1) year from that date unless otherwise terminated by County. This Contract may be renewed for three (3) additional years, upon mutual agreement of both Parties. Renewal amendments may require approval of the County Board of Supervisors~~

AMENDMENT 2

2. **Term:** Contract shall be effective July 1, 2017, and shall continue for 3 years from that date unless otherwise terminated by County.

3. **Contingency of Funds:** Contractor acknowledges that funding or portions of funding for this Contract may be contingent upon state budget approval; receipt of funds from, and/or obligation of funds by, the state of California to County; and inclusion of sufficient funding for the services hereunder in the budget approved by County's Board of Supervisors for each fiscal year covered by this Contract. If such approval, funding or appropriations are not forthcoming, or are otherwise limited, County may immediately terminate or modify this Contract without penalty.
4. **Precedence:** The Contract documents consist of this Contract and attachments. In the event of a conflict between or among the Contract documents, the order of precedence shall be the provisions of the main body of this Contract, i.e., those provisions set forth in the recitals and articles of this Contract, and then the attachments.
5. **Contractor's Project Manager and Contractor Personnel:** Contractor shall appoint a Project Manager, as specified in Article 27. "Notices" to direct Contractor's efforts in fulfilling Contractor's obligations under this Contract. This Project Manager shall be subject to approval by County and shall not be changed without the written consent of County's Project Manager, which consent shall not be unreasonably withheld. Contractor's Project Manager and Contractor personnel shall be assigned to this project for the duration of this Contract and shall diligently pursue all work and services to meet the project time lines. Contractor personnel are those individuals who report directly to Contractor's Project Manager. Contractor warrants that all Contractor personnel engaged in the performance of work under this Contract shall possess sufficient experience and/education to perform the services requested by County.
6. **County's Project Manager:** County shall appoint a Project Manager, as specified in Article 27. "Notices", to act as liaison between County, and Contractor during the term of this Contract. County's Project Manager shall coordinate the activities of County staff assigned to work with Contractor.

County's Project Manager shall have the right to require the removal and replacement of Contractor's Project Manager and Contractor personnel. County's Project Manager shall notify Contractor in writing of such action. Contractor shall accomplish the removal within 3 calendar days after written notice by County's Project Manager. County's Project Manager shall review and approve the appointment of the replacement for Contractor's Project Manager and Contractor personnel. Said approval shall not be unreasonably withheld.
7. **Conflict of Interest:** Contractor shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict with the best interests of County. This obligation shall apply to Contractor; Contractor's employees, agents, and relatives; subcontractors; and third parties associated with accomplishing work and services hereunder. Contractor's efforts shall include, but not be limited to establishing precautions to prevent its employees or agents from making, receiving, providing or offering gifts, entertainment, payments, loans or other considerations which could be deemed to appear to influence individuals to act contrary to the best interests of County.
8. **Existing Site Conditions:** Information respecting the site of the work given in drawings or specifications has been obtained by County's representatives and is believed to be reasonably correct, but County does not warrant either the completeness or accuracy of such information, and it is the responsibility of Contractor to verify all such information.

9. **Hazardous Conditions:** Whenever Contractor's operations create a condition hazardous to traffic or to the public, Contractor shall provide flagmen and furnish, erect and maintain control devices as are necessary to prevent accidents or damage or injury to the public at Contractor's expense and without cost to County. Contractor shall comply with County directives regarding potential hazards.
- Emergency lights and traffic cones must also be readily available at all times and must be used in any hazardous condition. Emergency traffic cones must be placed in front of and behind vehicles to warn oncoming traffic.
- Signs, lights, flags, and other warning and safety devices shall conform to the requirements set forth in Chapter 5 of the current traffic manual, Traffic Control for Construction and Maintenance Work Zones, published by the state of California Department of Transportation.
10. **Conditions Affecting Work:** Contractor shall be responsible for taking all steps reasonably necessary to ascertain the nature and location of the work to be performed under this Contract and to know the general conditions which can affect the work or the cost thereof. Any failure by Contractor to do so will not relieve Contractor from responsibility for successfully performing the work without additional cost to County. County assumes no responsibility for any understanding or representations concerning the nature, location(s) or general conditions made by any of its officers or agents prior to the execution of this Contract, unless such understanding or representations by County are expressly stated in the Contract.
11. **Contractor's Personnel:** Contractor warrants that all Contractor personnel engaged in the performance of work under this Contract shall possess sufficient experience and/education to perform the services requested by County. County expressly retains the right to have any of Contractor personnel removed from performing services under this Contract. Contractor shall effectuate the removal of the specified Contractor personnel from providing any services to County under this Contract within one business day of notification by County. County shall submit the request in writing to Contractor's Project Manager. County is not required to provide any reason, rationale or additional factual information if it elects to request any specific Contractor personnel be removed from performing services under this Contract.
12. **Usage:** No guarantee is given by County to Contractor regarding usage of this Contract. Usage figures, if provided, are approximate, based upon the last usage. Contractor agrees to supply services and/or commodities requested, as needed by County, at prices listed in the Contract, regardless of quantity requested. Orders may be placed against this Contract at the convenience of the using agency/department.
13. **Usage Reports:** Upon County request, Contractor shall submit usage reports to County which shall include, at minimum, summarized quantities used during the Contract period by line item description as specified in the Contract. The usage report shall be in a format specified by County.
14. **Cooperative Agreement:** The provisions and pricing of this Contract will be extended to other County of Orange agencies/departments ("cooperative entities"). Cooperative entities wishing to use this Contract will be responsible for issuing their own purchase documents/price agreements, providing for their own acceptance, and making any subsequent payments. The cooperative entities are responsible for obtaining all certificates of insurance and bonds required. Contractor is responsible for providing each

cooperative entity a copy of the Contract upon request by the cooperative entity. County of Orange makes no guarantee of usage by other users of this Contract. County of Orange may authorize the loading of this agreement into an electronic commerce system.

Contractor shall be required to maintain a list of the cooperative entities that have used this Contract. The list shall report dollar volumes spent quarterly and annually and shall be provided on a quarterly basis to County lead agency.

15. **Prevailing Wage:** Contractor and any Subcontractor(s) shall comply with the provisions of Labor Code Sections 1771 et seq., and shall pay workers employed on the Contract not less than the general prevailing rates of per diem wages and holiday and overtime wages as determined by the Director of Industrial Relations. Contractor shall post a copy of these wage rates at the job site for each craft, classification, or type of worker needed in the performance of this Contract, as well as any additional job site notices required by Labor Code Section 1771.4(b). Copies of these rates are on file at the principal office of County's representative, or may be obtained from the State Office, Department of Industrial Relations ("DIR") or from the DIR's website at www.dir.ca.gov. If the Contract is federally funded, Contractor and any Subcontractor(s) shall not pay less than the higher of these rates or the rates determined by the United States Department of Labor.

All contractors and subcontractors must comply with the requirements of Labor Code Section 1771.1(a), pertaining to registration of contractors pursuant to Section 1725.5. Bids cannot be accepted from unregistered contractors except as provided in Section 1771.1. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. After award of the contract, CONTRACTOR and each Subcontractor shall furnish electronic payroll records directly to the Labor Commissioner in the manner specified in Labor Code Section 1771.4.

16. **Records:** Contractor shall keep true and accurate accounts, records, books and data which shall correctly reflect the business transacted by Contractor in accordance with generally accepted accounting principles. These records shall be stored in the County of Orange for a period of seven (7) years. Storage of records in another County will require special clearance from County's Project Manager for this project.

Contractor and any Subcontractor(s) shall comply with the requirements of Labor Code Section 1776. Such compliance includes the obligation to furnish the records specified in Section 1776 directly to the Labor Commissioner in an electronic format, or other format as specified by the Commissioner, in the manner provided by Labor Code Section 1771.4.

The requirements of Labor Code Section 1776 provide in part:

- i. Contractor and any Subcontractor(s) performing any portion of the work under this Contract shall keep an accurate record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by Contractor or any Subcontractor(s) in connection with the work.
- ii. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

- (A) The information contained in the payroll record is true and correct.
 - (B) The employer has complied with the requirements of Labor Code Sections 1771, 1811, and 1815 for any work performed by his or her employees in connection with the Contract.
- iii. The payroll records shall be certified and shall be available for inspection at the principal office of Contractor on the basis set forth in Labor Code Section 1776.
 - iv. Contractor shall inform County of the location of the payroll records, including the street address, city and county, and shall, within five working days, provide a notice of any change of location and address of the records.
 - v. Pursuant to Labor Code Section 1776, Contractor and any Subcontractor(s) shall have 10 days in which to provide a certified copy of the payroll records subsequent to receipt of a written notice requesting the records described herein. In the event that Contractor or any Subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to County, forfeit \$100, or a higher amount as provided by Section 1776, for each calendar day, or portion thereof, for each worker to whom the noncompliance pertains, until strict compliance is effectuated. Contractor acknowledges that, without limitation as to other remedies of enforcement available to County, upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement of the California Department of Industrial Relations, such penalties shall be withheld from progress payments then due Contractor. Contractor is not subject to a penalty assessment pursuant to this section due to the failure of a Subcontractor to comply with this section.
17. **Child Support Enforcement Requirements:** Contractor is required to comply with the child support enforcement requirements of County. Failure of Contractor to comply with all federal, state, and local reporting requirements for child support enforcement or to comply with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignment shall constitute a material breach of the Contract. Failure to cure such breach within 60 calendar days of notice from County shall constitute grounds for termination of the Contract.
18. **Publication:** No copies of sketches, schedules, written documents, computer based data, photographs, maps or graphs, including graphic art work, resulting from performance or prepared in connection with this Contract, are to be released by Contractor and/or anyone acting under the supervision of Contractor to any person, partnership, company, corporation, or agency, without prior written approval by County, except as necessary for the performance of the services of this Contract. All press contacts, including graphic display information to be published in newspapers, magazines, etc., are to be administered only after County approval.
19. **News/Information Release:** Contractor agrees that it will not issue any news releases or make any contact with the media in connection with either the award of this Contract or any subsequent amendment of, or effort under this Contract. Contractors must first obtain review and approval of said news media contact from County through County's Project Manager. Any requests for interviews or information received by the media should be referred directly to County. Contractors are not authorized to serve as a media spokespersons for County projects without first obtaining permission from County's Project Manager.

20. **Breach of Contract:** The failure of the Contractor to comply with any of the provisions, covenants or conditions of this Contract, shall constitute a material breach of this Contract. In such event the County may, and in addition to any other remedies available at law, in equity, or otherwise specified in this Contract:
- i. Afford the Contractor written notice of the breach and ten calendar days or such shorter time that may be specified in this Contract within which to cure the breach;
 - ii. Discontinue payment to the Contractor for and during the period in which the Contractor is in breach and offset against any monies billed by the Contractor but yet unpaid by the County those monies disallowed pursuant to the above.
 - iii. Terminate the Contract immediately without penalty.
21. **Contract Disputes:** The Parties shall deal in good faith and attempt to resolve potential disputes informally. If the dispute concerning a question of fact arising under the terms of this Contract is not disposed of in a reasonable period of time by the Contractor's Supervisor and the County's project manager as specified in Article 27. "Notices" by way of the following process, such matter shall be brought to the attention of the County DPA by way of the following process:
- i. The Contractor shall submit to the County DPA a written demand for a final decision regarding the disposition of any dispute between the Parties arising under, related to, or involving this Contract, unless the County, on its own initiative, has already rendered such a final decision.
 - ii. The Contractor's written demand shall be fully supported by factual information, and, if such demand involves a cost adjustment to the Contract, the Contractor shall include with the demand a written statement signed by a senior official indicating that the demand is made in good faith, that the supporting data are accurate and complete, and that the amount requested accurately reflects the Contract adjustment for which the Contractor believes the County is liable.
 - iii. Pending the final resolution of any dispute arising under, related to, or involving this Contract, the Contractor agrees to diligently proceed with the performance of this Contract, including the delivery of goods and/or provision of services. The Contractor's failure to diligently proceed shall be considered a material breach of this Contract. Any final decision of the County shall be expressly identified as such, shall be in writing, and shall be signed by the County DPA or his designee. If the County fails to render a decision within 90 days after receipt of the Contractor's demand, it shall be deemed a final decision adverse to the Contractor's contentions. The County's final decision shall be conclusive and binding regarding the dispute unless the Contractor commences action in a court of competent jurisdiction to contest such decision within 90 days following the date of the County's final decision or one year following the accrual of the cause of action, whichever is later.
22. **Orderly Termination:** Upon termination or other expiration of this Contract, each Party shall promptly return to the other Party all papers, materials, and other properties of the other held by each for purposes of execution of the Contract. In addition, each Party will assist the other Party in orderly termination of this Contract and the transfer of all assets,

tangible and intangible, as may be necessary for the orderly, non-disruptive business continuation of each Party.

23. **Expenditure Limit:** Contractor shall notify County's Project Manager in writing when the expenditures against the Contract reach 75 percent of the dollar limit on the Contract. County will not be responsible for any expenditure overruns and will not pay for work exceeding the dollar limit on the Contract unless an amendment to cover those costs has been issued.
24. **Errors and Omissions:** All reports, files and other documents prepared and submitted by Contractor shall be complete and shall be carefully checked by the professional(s) identified by Contractor as Project Manager and personnel prior to submission to County. Contractor agrees that County review is discretionary and Contractor shall not assume that County will discover errors and/or omissions. If County discovers any errors or omissions prior to approving Contractor's reports, files and other written documents, the reports, files or documents will be returned to Contractor for correction. Should County or others discover errors or omissions in the reports, files or other written documents submitted by Contractor after County approval thereof, County approval of Contractor's reports, files or documents shall not be used as a defense by Contractor in any action between County and Contractor, and the reports, files or documents will be returned to Contractor for correction.
25. **Ownership of Documents:** County has permanent ownership of all directly connected and derivative materials produced under this Contract by Contractor. All documents, reports and other incidental or derivative work or materials furnished hereunder shall become, and remain, the sole property of County and may be used by County as it may require without additional cost to County. None of the documents, reports and other incidental or derivative work or furnished materials shall be used by Contractor without the express written consent of County.
26. **Title to Data:** All materials, documents, data or information obtained from County data files or any County medium furnished to Contractor in the performance of this Contract will at all times remain the property of County. Such data or information may not be used or copied for direct or indirect use by Contractor after completion or termination of this Contract without the express written consent of County. All materials, documents, data or information, including copies, must be returned to County at the end of this Contract.
27. **Notices:** Any and all notices, requests demands and other communications contemplated, called for, permitted, or required to be given hereunder shall be in writing, except through the course of County's Project Manager and Contractor's Project Manager routine exchange of information and cooperation during the terms of the work and services. Any written communications shall be deemed to have been duly given upon actual in-person delivery, if delivery is by direct hand, or upon delivery on the actual day of receipt or no greater than four calendar days after being mailed by US certified or registered mail, return receipt requested, postage prepaid, whichever occurs first. The date of mailing shall count as the first day. All communications shall be addressed to the appropriate Party at the address stated herein or such other address as the Parties hereto may designate by written notice from time to time in the manner aforesaid.

County' Project Manger: OC Public Works/OC Operations & Maintenance
 Attn: Kris Ruiz
 2301 North Glassell Street

Orange, CA 92865
Phone: 714-955-0346
Email: kris.ruiz@ocpw.ocgov.com

cc: OC Public Works/Procurement Division
Attn: Nancy Foroughi, CPPB, County DPA
2301 North Glassell Street, 2nd Floor
Orange, CA 92865
Phone: 714-667-4951
Email: nancy.foroughi@ocpw.ocgov.com

Contractor: Ben's Asphalt, Incorporated
Attn: John Skeffington
2200 South Yale Street
Santa Ana, CA 92704
Phone: 714-540-1700
Email: john.skeffington@bensasphalt.com

28. **Governing Law and Venue:** This Contract has been negotiated and executed in the State of California and shall be governed by and construed under the laws of the State of California. In the event of any legal action to enforce or interpret this Contract, the sole and exclusive venue shall be a court of competent jurisdiction located in Orange County, California, and the Parties hereto agree to and do hereby submit to the jurisdiction of such court, notwithstanding Code of Civil Procedure section 394. Furthermore, the Parties specifically agree to waive any and all rights to request that an action be transferred for trial to another County.
29. **Entire Contract:** This Contract, including Attachments which are attached hereto and incorporated herein by this reference, when accepted by Contractor either in writing or by the shipment of any article or other commencement of performance hereunder, contains the entire Contract between the Parties with respect to the matters herein and there are no restrictions, promises, warranties or undertakings other than those set forth herein or referred to herein. No exceptions, alternatives, substitutes or revisions are valid or binding on County unless authorized by County in writing. Electronic acceptance of any additional terms, conditions or supplemental Contracts by any County employee or agent, including but not limited to installers of software, shall not be valid or binding on County unless accepted in writing County's Purchasing Agent or his designee.
30. **Amendments:** No alteration or variation of the terms of this Contract shall be valid unless made in writing and signed by the Parties; no oral understanding or agreement not incorporated herein shall be binding on either of the Parties; and no exceptions, alternatives, substitutes or revisions are valid or binding on County unless authorized by County in writing.
31. **Taxes:** All prices shall include any applicable sales tax.
32. **Delivery:** Time of delivery of goods or services is of the essence in this Contract. County reserves the right to refuse any goods or services and to cancel all or any part of the goods not conforming to applicable specifications, drawings, samples or description, or services that do not conform to the prescribed Scope of Work. Acceptance of any part of the order for goods shall not bind County to accept future shipments, nor deprive it of the right to return goods already accepted, at Contractor's expense. Overshipments and undershipments of goods shall be only as agreed to in writing by County. Delivery shall

not be deemed to be complete until all goods, or services, have actually been received and accepted in writing by County.

33. **Acceptance/Payment:** Unless otherwise agreed to in writing by County 1) acceptance shall not be deemed complete unless in writing and until all the goods/services have actually been received, inspected, and tested to the satisfaction of County, and 2) payment shall be made in arrears after services have been provided.
34. **Warranty:** Contractor expressly warrants that the goods/services covered by this Contract are 1) free of liens or encumbrances, 2) merchantable and good for the ordinary purposes for which they are used, and 3) fit for the particular purpose for which they are intended. Acceptance of this order shall constitute an agreement upon Contractor's part to indemnify, defend and hold County and its indemnities as identified in article "60" below, and as more fully described in article "60", harmless from liability, loss, damage and expense, including reasonable counsel fees, incurred or sustained by County by reason of the failure of the goods/services to conform to such warranties, faulty work performance, negligent or unlawful acts, and non-compliance with any applicable state or federal codes, ordinances, orders, or statutes, including the Occupational Safety and Health Act (OSHA) and the California Industrial Safety Act. Such remedies shall be in addition to any other remedies provided by law.
35. **Assignment or Subcontracting:** The terms, covenants, and conditions contained herein shall apply to and bind the heirs, successors, executors, administrators and assigns of the Parties. Furthermore, neither the performance of this Contract nor any portion thereof may be assigned or subcontracted by Contractor without the express written consent of County. Any attempt by Contractor to assign or sub-contract the performance or any portion thereof of this Contract without the express written consent of County shall be invalid and shall constitute a breach of this Contract.
36. **Non-Discrimination:** In the performance of this Contract, Contractor agrees that it will comply with the requirements of Section 1735 of the California Labor Code and not engage nor permit any subcontractors to engage in discrimination in employment of persons because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons. Contractor acknowledges that a violation of this provision shall subject Contractor to all the penalties imposed for a violation of Anti-Discrimination Law or regulation, including but not limited to, Section 1720 et seq. of the California Labor Code.
37. **Termination:** In addition to any other remedies or rights it may have by law and those set forth in this Contract, County has the right to terminate this Contract without penalty immediately with cause or after 30 days' written notice without cause, unless otherwise specified. Cause shall be defined as any breach of Contract, any misrepresentation or fraud on the part of Contractor. Exercise by County of its right to terminate the Contract shall relieve County of all further obligations.
38. **Consent to Breach Not Waiver:** No term or provision of this Contract shall be deemed waived and no breach excused, unless such waiver or consent shall be in writing and signed by the Party claimed to have waived or consented. Any consent by any Party to, or waiver of, a breach by the other, whether express or implied, shall not constitute consent to, waiver of, or excuse for any other different or subsequent breach.
39. **Remedies Not Exclusive:** The remedies for breach set forth in this Contract are cumulative as to one another and as to any other provided by law, rather than exclusive;

and the expression of certain remedies in this Contract does not preclude resort by either Party to any other remedies provided by law.

40. **Independent Contractor:** Contractor shall be considered an independent Contractor and neither Contractor its employees nor anyone working for Contractor under this Contract shall be considered an agent or an employee of County. Neither Contractor, employees nor anyone working for Contractor under this Contract shall qualify for workers' compensation or other fringe benefits of any kind through County.
41. **Performance:** Contractor shall perform all work under this Contract, taking necessary steps and precautions to perform the work to County's satisfaction. Contractor shall be responsible for the professional quality, technical assurance, timely completion and coordination of all documentation and other goods/services furnished by Contractor under this Contract. Contractor shall perform all work diligently, carefully, and in a good and workman-like manner; shall furnish all labor, supervision, machinery, equipment, materials, and supplies necessary therefore; shall at its sole expense obtain and maintain all permits and licenses required by public authorities, including those of County required in its governmental capacity, in connection with performance of the work; and, if permitted to subcontract, shall be fully responsible for all work performed by subcontractors.
42. **Insurance Provisions:** Prior to the provision of services under this Contract, the Contractor agrees to purchase all required insurance at Contractor's expense, including all endorsements required herein, necessary to satisfy the County that the insurance provisions of this Contract have been complied with. Contractor agrees to keep such insurance coverage, Certificates of Insurance, and endorsements on deposit with the County during the entire term of this Contract. In addition, all subcontractors performing work on behalf of Contractor pursuant to this Contract shall obtain insurance subject to the same terms and conditions as set forth herein for Contractor.

Contractor shall ensure that all subcontractors performing work on behalf of Contractor pursuant to this Contract shall be covered under Contractor's insurance as an Additional Insured or maintain insurance subject to the same terms and conditions as set forth herein for Contractor. Contractor shall not allow subcontractors to work if subcontractors have less than the level of coverage required by County from Contractor under this Contract. It is the obligation of Contractor to provide notice of the insurance requirements to every subcontractor and to receive proof of insurance prior to allowing any subcontractor to begin work. Such proof of insurance must be maintained by Contractor through the entirety of this Contract for inspection by County representative(s) at any reasonable time.

All self-insured retentions (SIRs) and deductibles shall be clearly stated on the Certificate of Insurance. If no SIRs or deductibles apply, indicate this on the Certificate of Insurance with a zero (0) by the appropriate line of coverage. Any self-insured retention (SIR) or deductible in an amount in excess of \$25,000 (\$5,000 for automobile liability), which shall specifically be approved by the County Executive Office (CEO)/Office of Risk Management upon review of Contractor's current audited financial report.

If the Contractor fails to maintain insurance acceptable to the County for the full term of this Contract, the County may terminate this Contract.

Qualified Insurer

The policy or policies of insurance must be issued by an insurer with a minimum rating of A- (Secure A.M. Best's Rating) and VIII (Financial Size Category as determined by the most current edition of the **Best's Key Rating Guide/Property-Casualty/United States or ambest.com**). It is preferred, but not mandatory, that the insurer be licensed to do business in the state of California (California Admitted Carrier).

If the insurance carrier does not have an A.M. Best Rating of A-/VIII, the CEO/Office of Risk Management retains the right to approve or reject a carrier after a review of the company's performance and financial ratings.

The policy or policies of insurance maintained by the Contractor shall provide the minimum limits and coverage as set forth below:

<u>Coverage</u>	<u>Minimum Limits</u>
Commercial General Liability	\$1,000,000 per occurrence \$2,000,000 aggregate
Automobile Liability including coverage for owned, non-owned and hired vehicles	\$1,000,000 per occurrence
Workers Compensation	Statutory
Employers Liability Insurance	\$1,000,000 per occurrence

Required Coverage Forms

The Commercial General Liability coverage shall be written on Insurance Services Office (ISO) form CG 00 01, or a substitute form providing liability coverage at least as broad.

The Business Auto Liability coverage shall be written on ISO form CA 00 01, CA 00 05, CA 0012, CA 00 20, or a substitute form providing coverage at least as broad.

Required Endorsements

The Commercial General Liability policy shall contain the following endorsements, which shall accompany the Certificate of Insurance:

An Additional Insured endorsement using ISO form CG 2010 or CG 2033 or a form at least as broad naming the County of Orange its elected and appointed officials, officers, agents and employees as Additional Insureds.

A primary non-contributing endorsement evidencing that the Contractor's insurance is primary and any insurance or self-insurance maintained by the County of Orange shall be excess and non-contributing.

The Workers' Compensation policy shall contain a waiver of subrogation endorsement waiving all rights of subrogation against the County of Orange, its elected and appointed officials, officers, agents and employees.

All insurance policies required by this Contract shall waive all rights of subrogation against the County of Orange, its elected and appointed officials, officers, agents and employees when acting within the scope of their appointment or employment.

Contractor shall notify County in writing within thirty (30) days of any policy cancellation and ten (10) days for non-payment of premium and provide a copy of the cancellation notice to County. Failure to provide written notice of cancellation may constitute a material breach of the Contract, upon which the County may suspend or terminate this Contract.

The Commercial General Liability policy shall contain a severability of interests clause also known as a "separation of insureds" clause (standard in the ISO CG 0001 policy).

Insurance certificates should be forwarded to:

County of Orange, OC Public Works
Attn: Procurement Division
2301 North Glassell Street, 2nd Floor
Orange, CA 92865

If the Contractor fails to provide the insurance certificates and endorsements within seven (7) days of notification by CEO/Purchasing or the agency/department purchasing division, award may be made to the next qualified vendor.

County expressly retains the right to require Contractor to increase or decrease insurance of any of the above insurance types throughout the term of this Contract. Any increase or decrease in insurance will be as deemed by County of Orange Risk Manager as appropriate to adequately protect County.

County shall notify Contractor in writing of changes in the insurance requirements. If Contractor does not deposit copies of acceptable Certificates of Insurance and endorsements with County incorporating such changes within thirty (30) days of receipt of such notice, this Contract may be in breach without further notice to Contractor, and County shall be entitled to all legal remedies.

The procuring of such required policy or policies of insurance shall not be construed to limit Contractor's liability hereunder nor to fulfill the indemnification provisions and requirements of this Contract, nor act in any way to reduce the policy coverage and limits available from the insurer.

43. **Bills and Liens:** Contractor shall pay promptly all indebtedness for labor, materials and equipment used in performance of the work. Contractor shall not permit any lien or charge to attach to the work or the premises, but if any does so attach, Contractor shall promptly procure its release and, in accordance with the requirements of Article "60" below, indemnify, defend, and hold County harmless and be responsible for payment of all costs, damages, penalties and expenses related to or arising from or related thereto.
44. **Changes:** Contractor shall make no changes in the work or perform any additional work without County's specific written approval.
45. **Change of Ownership:** Contractor agrees that if there is a change or transfer in ownership of Contractor's business prior to completion of this Contract, the new owners shall be required under terms of sale or other transfer to assume Contractor's duties and obligations contained in this Contract and complete them to the satisfaction of County.
46. **Force Majeure:** Contractor shall not be assessed with liquidated damages or unsatisfactory performance penalties during any delay beyond the time named for the performance of this Contract caused by any act of God, war, civil disorder, employment

strike or other cause beyond its reasonable control, provided Contractor gives written notice of the cause of the delay to County within 36 hours of the start of the delay and Contractor avails himself of any available remedies.

47. **Confidentiality:** Contractor agrees to maintain the confidentiality of all County, and County-related records and information pursuant to all statutory laws relating to privacy and confidentiality that currently exist or exist at any time during the term of this Contract. All such records and information shall be considered confidential and kept confidential by Contractor and Contractor's staff, agents and employees.
48. **Compliance with Laws:** Contractor represents and warrants that services to be provided under this Contract shall fully comply, at Contractor's expense, with all standards, laws, statutes, restrictions, ordinances, requirements, and regulations (collectively "laws"), including, but not limited to those issued by County in its governmental capacity and all other laws applicable to the services at the time services are provided to and accepted by County. Contractor acknowledges that County is relying on Contractor to ensure such compliance, and pursuant to the requirements of Article "60" below, Contractor agrees that it shall defend, indemnify and hold County and County Indemnitees harmless from all liability, damages, costs and expenses arising from or related to a violation of such laws.
49. **Freight (F.O.B. Destination):** Contractor assumes full responsibility for all transportation, transportation scheduling, packing, handling, insurance, and other services associated with delivery of all products deemed necessary under this Contract.
50. **Pricing:** The Contract price, as more fully set forth in Attachment B, shall include full compensation for providing all required goods in accordance with required specifications, or services as specified herein or when applicable, in the Scope of Work attached to this Contract, and no additional compensation will be allowed therefore, unless otherwise provided for in this Contract.
51. **Intentionally left blank.**
52. **Terms and Conditions:** Contractor acknowledges that it has read and agrees to all terms and conditions included in this Contract.
53. **Headings:** The various headings and numbers herein, the grouping of provisions of this Contract into separate clauses and articles, and the organization hereof are for the purpose of convenience only and shall not limit or otherwise affect the meaning hereof.
54. **Severability:** If any term, covenant, condition or provision of this Contract is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions hereof shall remain in full force and effect and shall in no way be affected, impaired or invalidated thereby.
55. **Calendar Days:** Any reference to the word "day" or "days" herein shall mean calendar day or calendar days, respectively, unless otherwise expressly provided.
56. **Attorneys Fees:** In any action or proceeding to enforce or interpret any provision of this Contract, or where any provision hereof is validly asserted as a defense, each Party shall bear its own attorney's fees, costs and expenses.
57. **Interpretation:** This Contract has been negotiated at arm's length and between persons sophisticated and knowledgeable in the matters dealt with in this Contract. In addition,

each Party has been represented by experienced and knowledgeable independent legal counsel of their own choosing, or has knowingly declined to seek such counsel despite being encouraged and given the opportunity to do so. Each Party further acknowledges that they have not been influenced to any extent whatsoever in executing this Contract by any other Party hereto or by any person representing them, or both. Accordingly, any rule of law (including California Civil Code Section 1654) or legal decision that would require interpretation of any ambiguities in this Contract against the Party that has drafted it is not applicable and is waived. The provisions of this Contract shall be interpreted in a reasonable manner to affect the purpose of the Parties and this Contract.

58. **Authority:** The Parties to this Contract represent and warrant that this Contract has been duly authorized and executed and constitutes the legally binding obligation of their respective organization or entity, enforceable in accordance with its terms.
59. **Employee Eligibility Verification:** Contractor warrants that it fully complies with all Federal and State statutes and regulations regarding the employment of aliens and others and that all its employees performing work under this Contract meet the citizenship or alien status requirement set forth in Federal statutes and regulations. Contractor shall obtain, from all employees performing work hereunder, all verification and other documentation of employment eligibility status required by Federal or State statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986, 8 U.S.C. §1324 et seq., as they currently exist and as they may be hereafter amended. Contractor shall retain all such documentation for all covered employees for the period prescribed by the law. Contractor shall indemnify, defend with counsel approved in writing by County, and hold harmless, County, its agents, officers, and employees from employer sanctions and any other liability which may be assessed against Contractor or County or both in connection with any alleged violation of any Federal or State statutes or regulations pertaining to the eligibility for employment of any persons performing work under this Contract.
60. **Indemnification:** Contractor agrees to indemnify, defend with counsel approved in writing by County, and hold County, its elected and appointed officials, officers, employees, agents and those special districts and agencies which County's Board of Supervisors acts as the governing Board ("County Indemnitees") harmless from any claims, demands or liability of any kind or nature, including but not limited to personal injury or property damage, arising from or related to the services, products or other performance provided by Contractor pursuant to this Contract. If judgment is entered against Contractor and County by a court of competent jurisdiction because of the concurrent active negligence of County or County Indemnitees, Contractor, County, agree that liability will be apportioned as determined by the court. Neither Party shall request a jury apportionment.
61. **Audits/Inspections:** Contractor agrees to permit the County's Auditor-Controller or the Auditor-Controller's authorized representative (including auditors from a private auditing firm hired by the County) access during normal working hours to all books, accounts, records, reports, files, financial records, supporting documentation, including payroll and accounts payable/receivable records, and other papers or property of contractor for the purpose of auditing or inspecting any aspect of performance under this contract. The inspection and/or audit will be confined to those matters connected with the performance of the contract including, but not limited to, the costs of administering the contract. The County will provide reasonable notice of such an audit or inspection.

The County reserves the right to audit and verify the contractor's records before final payment is made.

Contractor agrees to maintain such records for possible audit for a minimum of three years after final payment, unless a longer period of records retention is stipulated under this contract or by law. Contractor agrees to allow interviews of any employees or others who might reasonably have information related to such records. Further, contractor agrees to include a similar right to the County to audit records and interview staff of any subcontractor related to performance of this contract.

Should the contractor cease to exist as a legal entity, the contractor's records pertaining to this agreement shall be forwarded to the surviving entity in a merger or acquisition or, in the event of liquidation, to the County's project manager.

IN WITNESS WHEREOF, the Parties hereto have executed this Contract on the dates shown below their respective signatures below.

BEN'S ASPHALT, INCORPORATED* a State of California corporation

By: _____

Print Name: _____

Title: _____
Corporate Officer

Date: _____

By: _____

Print Name: _____

Title: _____
Corporate Officer

Date: _____

COUNTY OF ORANGE, a political subdivision of the State of California

By _____

Print Name _____

Title Deputy Purchasing Agent

Date _____

APPROVED AS TO FORM:
County Counsel

By _____
Deputy

Date _____

* If the contracting party is a corporation, (2) two signatures are required: one (1) signature by the Chairman of the Board, the President or any Vice President; and one (1) signature by the Secretary, any Assistant Secretary, the Chief Financial Officer or any Assistant Treasurer. The signature of one person alone is sufficient to bind a corporation, as long as he or she holds corporate offices in each of the two categories described above. For County purposes, proof of such dual office holding will be satisfied by having the individual sign the instrument twice, each time indicating his or her office that qualifies under the above described provision. In the alternative, a single corporate signature is acceptable when accompanied by a corporate resolution demonstrating the legal authority of the signator to bind the corporation.

ATTACHMENT A
SCOPE OF WORK

I. DESCRIPTION OF WORK

- A. The work to be done consists, in general, of minor road maintenance (removal and replacement of isolated areas of deteriorated pavement, filling pot holes, patching low spots, paving and/or installing road shoulders and roadside ditches, crack sealing and fog sealing of asphalt concrete curbs) on roads throughout Orange County. Work locations for this contract will include public roads within the unincorporated portions of Orange County and cities for which the County is under contract to perform road maintenance (Dana Point, Lake Forest, and Mission Viejo), County-owned facilities and flood control properties.
- B. Other items of work or details not mentioned above that are required by OC Public Works Standard Plans, http://ocpublicworks.com/about/oc_public_works_standard_plans (hereinafter, "Plans"); the "Greenbook" – Standard Specifications for Public Works Construction (hereinafter "Standard Specifications"), or this Scope of Work, shall be performed, placed, constructed or installed.

II. MOBILIZATION

- A. Mobilization shall include compensation for providing bonds, insurance, financing, and moving equipment and labor to the job site, and contract administration for the entire duration of the Contract.
- B. **Full compensation for conforming to requirements of "Mobilization" will be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**

III. IDENTIFICATION AND SCHEDULING OF WORK

- A. County conducts recurring inspections of all County maintained roads and investigate citizen complaints of potholes and road damage. Inspector designates the limits of damaged areas with paint, documents the damage with Digital photos, a short summary of damage and required repair using a Maintenance Inspection Report (MIR) form. This report includes the specific location and Thomas Guide reference.
- B. County staff reviews, prioritizes and "packages" these reports to include several locations in the same general geographic area. Work packages, including photos, will be prepared for Contractor biweekly. Biweekly work package may include any of the work items in the Contract.
- C. Contractor will furnish a work plan indicating the day/date for work on each location in the biweekly work package. County reserves the right to insert additional locations into a biweekly work package at any time. When this occurs, Contractor may request Inspector to delete one or more other work locations from that biweekly work package if the total work package, including additional work, cannot be completed during designated completion period. Inspector will respond Contractor requests for deletion of work by close of business the next workday.

IV. WORK COMPLETION SCHEDULE

- A. Inspector will complete preparation of the biweekly work package by close of business Tuesday for the two week period beginning the following Monday. All work in the work package is to be completed by close of business the second Friday following the beginning of the work period. All work in each biweekly work package is to be completed within the two week period designated for that work package. Contractor is responsible for notifying Inspector if weather or other conditions preclude working on some or the entire work package. Such notification will be made within four hours of the event/occurrence.
- B. Inspector and Contractor are required to discuss the impact of weather or other agreed to delays in an attempt to identify these locations in the biweekly work package that cannot be completed on schedule. Inspector will normally include deleted items in the next biweekly work package.
- C. **Failure to complete the biweekly work package by the described date without Inspector's approved extension will result in a deduction of two hundred and fifty dollars (\$250.00) per day late penalty fee for each uncompleted locations.**

V. DEFICIENT PERFORMANCE

Liquidated Damages will be applied to deficient performance and/or late completion. Parties hereto agree that it is impracticable or extremely difficult to determine actual damages the County will sustain by reason of delay in performance. Therefore, Two Hundred Fifty Dollars (\$250.00) will be deducted and withheld from payments due or to become due to Contractor for each calendar day work is incomplete beyond the scheduled day. Contractor will be granted extension of time and will not be assessed Liquidated Damages for delays caused by acts of God.

VI. CONDUCT

Contractor personnel providing services under this Contract shall not be incompetent, disorderly, under the influence of alcohol or drugs; who fails or otherwise refuses to perform the work properly and acceptably, or is otherwise objectionable. County expressly retains the right to request any specific Contract personnel be precluded from providing services to County under this Contract. County is not required to provide any reason for requested removal of specified Contract personnel. Contractor shall effectuate removal of the requested Contractor personnel within three (3) calendar days.

VII. SUPERVISION

- A. Contractor shall provide a supervisor or foreman who shall be present at all times during Contract operations, and who shall be responsible for both conduct and workmanship. Said supervisor or foreman shall be able to communicate effectively in both written and oral English.
- B. **Full compensation for conforming to requirements of "Supervision" will be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**

VIII. REPORTING COMPLETED WORK

Each completed package must have Contractor's name, date of completion and name and signature of Contractor's representative certifying completion of work. Completed work requests will be delivered to the Inspector by the close of business, the Tuesday following the end of the biweekly work period.

IX. ACCEPTANCE OF WORK

Each work location reported as complete will be accepted by Inspector for payment unless Contractor is notified otherwise by close of business, the second Friday following Report of Completion.

X. WARRANTY OF WORK

Contractor warrants all work to be free from defects of design material and workmanship, for a period of one (1) year from the date of acceptance of work. Expressly included is the warranty of compaction of existing base material or sub-grade and asphalt concrete placed under this Contract and that traffic will not result in a depression of the patch or repaved area greater than 1/4" below the surrounding pavement. Contractor, promptly after receipt of notice shall make good, at his expense, all defects developing during this period, including labor and material.

XI. EMERGENCY/ON CALL WORK

- A. Contractor will be required to provide emergency/on call response, 24 hours per day, seven days a week, to potholes, sinkholes, and other emergency repairs as required. Contractor will be given specific locations to repair via telephone call from a County authorized representative. Contractor shall be compensated for responding to the emergency call and for the quantity of the work done. Contractor will be required to start the work indicated within 90 minutes of the initial telephone call and report back to County Representative upon completion of work specified.
- B. Contractor shall provide a 24 hour emergency phone numbers and names of a minimum of two contact individuals within one week of award of Contract. Should the phone number or contact person change during the course of the Contract those changes must be provided to County.
- C. **Failure by Contractor to respond to an emergency within allotted 90 minutes will result in damage for additional inspection, administration and public safety sustained. Two Hundred and Fifty Dollars (\$250.00) per hour will be deducted and forfeited from payment to Contractor for each and every hour over the 90 minutes specified with each emergency requested.**
- D. Contractor will be required to provide all traffic control required during emergency operations.
- E. **Emergency/On Call Work will be considered as included in the Contract unit bid price per "Each" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XII. COOPERATION

- A. The Contractor shall cooperate with all private property owners affected by the Project, notifying them at least 24 hours before commencement of any work on/or adjacent to their property.

The Contractor shall cooperate with utility companies doing on-going work and allow them sufficient time to finish their work

- B. **Full compensation for conforming to the requirements of "Cooperation" shall be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**

XIII. SOUND CONTROL

- A. Contractor will comply with all County and local sound control and noise level rules, regulations, and ordinance, which apply to any work performed pursuant to the Contract, and will make every effort to control any undue noise resulting from its operation.

- B. **Full compensation for conforming to requirements of "Sound Control" will be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**

XIV. DUST CONTROL

- A. No separate payment will be made for any work performed or material used to control dust resulting from the Contractor's performance of the work, or by public traffic, either inside or outside the right-of-way.

- B. Contractor will perform his operations in such a manner as to limit dust. Contractor will not create dust in such a quantity as to violate the South Coast Air Quality Management District's regulations.

- C. **Full compensation for conforming to requirements of "Dust Control" will be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**

XV. DEBRIS REMOVAL

- A. All trash and debris shall be removed from work area by the end of each working day. At other times during the progress of work, when required, Contractor shall remove all surplus materials, rubbish, and debris resulting from the work. Work area will be left in a neat, clean and acceptable condition as approved by Inspector. No stockpile of debris will be allowed at the site.

- B. Contractor will pick up and dispose of materials at a site outside of County right-of-way approved for disposal of such materials. Any debris dropped on the public street during entrance or exit of the site will be removed immediately by Contractor.

- C. **Full compensation for conforming to requirements of "Debris Removal" will be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**

XVI. WATER

- A. Contractor will furnish all water required for performance of this work, will make all arrangements for obtaining all water with the governing water district, and will comply with all requirements set forth by the governing water district.
- B. **Full compensation for conforming to requirements of "Water" will be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**

XVII. PARKING CONTROL

- A. Parked cars may interfere with the work to be performed. Therefore, Contractor is required to post, maintain, and subsequently remove, temporary "Tow Away No Parking" signs along the streets work is to be performed with no less than 24 hours prior to the start of said work. Contractor will furnish signs per sample provided by County. Contractor will fill in day and date for scheduled work. Contractor will be responsible for replacing any signs which are damaged or removed in order to maintain notice to the public. Contractor will be responsible for the removal of all temporary "Tow Away No Parking" signs upon completion of the work in posted area.
- B. **Full compensation for conforming to requirements of "Parking Control" will be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**

XVIII. TRAFFIC CONTROL

- A. Contractor will conduct its operations in a manner which will minimize traffic congestion during A.M. and P.M. peak-hour traffic. This may require beginning work after the A.M. peak-hour traffic and ending work before the P.M. peak-hour traffic.
- B. Contractor will maintain access to schools and commercial areas at all times during project operation.
- C. Spillage resulting from hauling operations along or across any public traveled way will be removed immediately by the Contractor, at his expense.

When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded, will in all cases yield to public traffic.
- D. Special emphasis will be placed on the use of "Construction Zone Ahead" (C18R) signs at the beginning, end and all access and/or intersecting streets with roads under construction. In addition to the construction zone signs, "Rough Road" (W33) signs will be used on all roads with a posted or marked bicycle trail.

Contractor will provide and maintain all signs, barricades, pedestals, flashers, delineators and other necessary facilities for the protection of the motoring public within the limits of the construction area and all its approaches, including advanced signing and barricades. He will also post proper signs to notify the public regarding the condition of the roadway, all in accordance with the provisions of the Vehicle Code and latest edition of the Manual of Uniform Traffic Control Devices (MUTCD), as published by the State of California, Department of Transportation.

- E. Flashing arrow signs, of the appropriate type per MUTCD, will be provided for all lane closures on all arterial highways and collector streets.
- F. Portable delineators, either conical (traffic cone) or tubular shaped plastic devices, with a minimum height of 28 inches will be used for delineation of the travel way.
- G. If the traffic cones or portable delineators are damaged, displaced or unacceptable for any reason by Inspector or are not in an upright position from any cause, said cones or portable delineators will immediately be replaced or restored to their original location, in an upright position, by Contractor.
- H. Contractor will maintain 11 Foot lanes of traffic in each direction at all times.
- I. Contractor will furnish such flagmen as are necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered. Flagmen, while on duty and assigned to give warning to the public that the street is under construction and of any dangerous conditions to be encountered as a result thereof, will perform their duties and will be provided with the necessary equipment in accordance with the current "Instructions to Flaggers", by the State of California, Department of Transportation. The equipment will be furnished and kept clean and in good repair by the Contractor, at its expense.
- J. Should Contractor appear to be neglectful or negligent in furnishing warning and protective measures as provided, Inspector may direct attention to the existence of a hazard and necessary warning and protective measures will be furnished and installed by Contractor, at its expense. Should Inspector point out the inadequacy of warning and protective measures, such action on the part of Inspector will not relieve Contractor from responsibility for public safety or abrogate its obligation to furnish and pay for these devices.
- K. Contractor will maintain safe working conditions at each work location.
- L. At the end of each day, all equipment and other obstructions will be removed from the roadway.
- M. **Full compensation for conforming to requirements of "Traffic Control" will be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**
- N. If the Contractor is required to submit **Traffic Control Plan prepared and stamped by a Registered Civil or Traffic Engineer**, the Contractor **shall be reimbursed for the actual cost** of the preparation and implementation of the plan without mark-up or profit margin.

XIX. PROTECTION AND RESTORATION OF EXISTING AREAS

Contractor will protect all furnishings and improvements from damage by its operations. All damage will be repaired or replaced, at the option of County, at Contractor's expense within three (3) days after notification of such damage by Inspector. Repairs and/or replacements will be equal to original in all aspects.

XX. SAFETY

Contractor agrees to perform all work outlined in this Contract in such a manner as to meet all accepted standards for safe practices during operations and to maintain safe conditions or premises and ways at all times, including safely stored equipment, machines and materials. This includes compliance with local County, State or other legal intents and terms of the applicable OSHA and CAL/OSHA Safety orders at all times so as to protect all persons, including Contractor's employees and Agency against injury or damage to their property.

XXI. BEST MAINTENANCE PRACTICES (BMP):

- A. The Santa Ana and San Diego Regional Water Quality Control Boards (RWQCB) have issued permits which govern storm water and non-storm water discharges resulting from areas owned and operated by the County of Orange, Orange County Flood Control District and incorporated cities of Orange County (collectively referred to as Permittees). RWQCB Permits are National Pollutant Discharge Elimination System (NPDES) Permits No. R8-2002-0001 and R8-2009-0030, respectively. Copies of the RWQCB Permits are available for review.
- B. In order to comply with the Permit requirements, the Permittees have developed a Drainage Area Management Plan (DAMP) which contains Model Maintenance Procedures with Best Management Practices (BMPs) that parties conducting the municipal activities must adhere to. These Model Maintenance Procedures apply to any party conducting municipal activities and contain pollution prevention and source control techniques to minimize the impact of those activities upon dry weather urban runoff, storm water runoff, and receiving water quality.
- C. Work performed under this Contract will conform to the Permit requirements, the DAMP, and the Model Maintenance Procedures. Contractor will fully understand the Model Maintenance Procedures applicable to activities that are being conducted under this Contract prior to conducting them and maintain copies of the Model Maintenance Procedures throughout Contract duration.
- D. Work shall be performed in conformance with BMP; see fact sheet "Roads, Streets and Highways Operation and Maintenance" (FP-3) downloaded at:
www.ocwatersheds.com/documents/bmp/municipalactivities
- E. Evaluation of activities subject to DAMP requirements performed under this Contract will be conducted to verify compliance with DAMP requirements and may be required through Contractor self-evaluation as determined by County.

XXII. PERMIT REQUIREMENTS

- A. The Contractor shall comply with the requirements of the following Permits, listed under Attachment "C. Permits:
 - 1. NPDES Permit No. CAS618030
 - 2. NPDES Permit No. CAG919002
- B. The Contractor shall review all permit requirements and shall modify the construction schedule, modify construction access, provide temporary protection and modify

construction practices as necessary to comply with the provisions of the Attachment "C. Permits".

- C. **Full compensation for complying with the requirements of Attachment "C. Permits"** (with the exception of the Construction Permit which will be paid for by County), **shall be included in the various items of work and no additional compensation will be allowed therefore.**

XXIII. DEWATERING

- A. Any groundwater that may be encountered shall be controlled and removed by methods of the Contractor's choice subject to the requirements of the California Regional Water Quality Control Board Individual Dewatering Permit, Section 401 Permit, and Flow and Acceptance of Water (see Section C).
- B. The dewatering system chosen shall relieve seepage pressure and keep the subgrade free from water. Regardless of the dewatering method chosen by the Contractor, the subgrade elevations shall be maintained. If the material at subgrade is unstable due to high moisture content, the Contractor shall remove the material and place fill at 90% Relative Compaction to re-establish the subgrade at no cost to the County. The Contractor may provide other methods of stabilization at subgrade at no cost to the County.
- C. The Contractor shall control the water level below the subgrade to prevent pumping of gravel base material.
- D. No discharge water quality problems are anticipated other than de-silting prior to discharging into the downstream portion of the channel. The cost of de-silting the discharge shall be included in the Contract price for dewatering.
- E. A de-silting basin will be required in at least one location to conform to the provisions of CRWQCB dewatering permit.
- F. **Full compensation for conforming to the requirements of "Dewatering" shall be included in the various items of work involved and no additional compensation will be allowed therefore.**

XXIV. UTILITIES

- A. The County has endeavored to locate and show on the plans the approximate locations of all private and public utilities and facilities to be encountered during construction. However, it is possible that, during the work, unknown substructures requiring relocation or protection may be encountered. Such unknown substructures will generally fall into two classes:
 - Class I - Those requiring relocation or protection at the expense of the owner, and
 - Class II - Those requiring relocation or protection at the expense of the County.
- B. For Class I utilities, the Contractor shall provide time and working space for protection or relocation activities and may be entitled to an extension of time for completion and/or extra compensation under the provisions of Subsection 5-5, "Delays."
- C. For Class II utilities, the County will make arrangements for the protection or relocation by the Owner or by the Contractor or by others. In the event either the protection or the

relocation is to be accomplished by the Contractor, the procedures of Section 3, "Changes in Work," of the Standard Specifications shall be used. In the event protection or relocation is accomplished by the owner or by others, the Contractor shall provide time and working space and may be entitled to an extension of time for completion and/or extra compensation under the provisions of said Section 5-5, "Delays."

- D. In the event any such unknown substructures should be disturbed or damaged, by no fault of the Contractor exercising reasonable care, the Contractor shall at once make necessary emergency repairs at no cost to the Contractor. Permanent repairs, if necessary, and/or relocation will be arranged by the County at no cost to the Contractor.
- E. Where facilities are shown on the plans, "To Be Relocated by Others," the County will issue the owner a "Notice to Relocate" or, by County agreement with owner, require owner to relocate. In the event difficulties delay relocation, which in the judgment of the Inspector cannot reasonably be foreseen, and require a delay in Contractor's completion date after all reasonable remedies for keeping Contract on schedule have been exhausted by Contractor including, but not limited to flow-charts and critical path scheduling, work simplification, and alternative construction methods, Inspector may allow extra compensation and extra time to the Contractor.
- F. The Contractor shall protect facilities shown on the plans, "To Be Relocated by Others," in both original and relocated positions and any damage to such facilities shall be immediately repaired to the owner's satisfaction at no cost to the County.
- G. The Contractor's attention is directed to the utility notification service provided by Underground Service Alert (USA). USA member utilities will provide the Contractor with the locations of their substructures in the construction area when the Contractor gives at least two working days notice to the Underground Service Alert by calling 1-800-422-4133. The Contractor shall call USA prior to any work over substructures to allow owners to locate and/or obtain accurate "ties" on their manholes, valve covers, meter boxes, etc.
- H. **Full compensation for conforming to the requirements of "Utilities" shall be considered as included in the various items of work involved and no additional compensation will be allowed therefore.**

XXV. VERIFICATION OF UTILITY LOCATION AND DEPTH

- A. Prior to the commencement of work, the Contractor shall verify the location and depth of all utilities, including service laterals and service connections, which have been indicated on the plans or marked by the respective owners and which may affect or be affected by its operations.
- B. All utilities designated on the plans to be protected in place shall be carefully uncovered if located within the lines of excavation and time shall be allowed for the Inspector to field check the location of such utilities to make certain that they will not interfere with maintenance. In the event a utility conflict exists, the County will either arrange for utility owner to relocate the utility or adjust grade and/or alignment of the proposed improvement. In the event any such facility should be disturbed or damaged, the Contractor shall at once make repairs to the satisfaction of the owner, or arrange with the owner to make repairs, at no cost to the County. Any delays or reconstruction of maintenance resulting from the Contractor's failure to verify utility locations and depths shall be made at the Contractor's expense.

- C. **Full compensation for “Verification of Utility Location and Depth” shall be considered as included in the various contract items of work involved and no additional compensation will be allowed therefore.**

XXVI. EXISTING FACILITIES

- A. This work shall consist of removing, relocating, or protecting existing facilities which interfere with maintenance. Removed facilities shall be disposed of, salvaged, relocated as specified in this Scope of Work, as shown on the Plans, or as directed by the Inspector.
- B. Trenches, holes, depressions and pits caused by the removal of highway facilities shall be backfilled with embankment material as provided in Section 300, "Earthwork", of the Standard Specifications. Such trenches, holes, depressions and pits that are in surfaced areas, otherwise to remain undisturbed, shall be backfilled with materials equal to or better in quality and to the same thickness as the surrounding materials.
- C. Material, shown on the plans or designated in this Scope of Work, which is to be salvaged or used in the maintenance work and which has been damaged or destroyed as a result of the Contractor's operations, shall be repaired or replaced by the Contractor, at his expense.
- D. Payment for these items shall be as described in Attachment B.

XXVII. HAND PATCH ASPHALT CONCRETE PAVEMENT

- A. Quantities and approximate sizes of “Hand Patch Asphalt Concrete Pavement” areas will vary for each location.
- B. Inspector will designate and mark the hand patch limits when preparing work request.
- C. Prior to placing the asphalt concrete, the area will be thoroughly cleaned by removing all loose and damaged material, moisture, dirt, and other foreign matter.
- D. Prior to placement of asphalt concrete, a tack coat of SS-1h emulsified asphalt will be uniformly applied to all contact surfaces at a rate of 0.05 gallon per square yard.
- E. Asphalt concrete used to hand patch the existing pavement will be AR-4000 and will conform to the provisions of OCPW Standard Plan 1805 and this Scope of Work.
- F. Asphalt concrete will not be placed when the atmospheric temperature is below 50 degrees Fahrenheit or during unsuitable weather.
- G. Contractor will notify Inspector via phone and/or e-mail at the end of the working day when striping and/or stenciling are damaged as a result of asphalt concrete repairs.
- H. **Full compensation for conforming to the requirements of “Hand Patch Asphalt Concrete Pavement” including:**
 - 1. **Cleaning and preparing the surface area to be patched;**
 - 2. **Applying the tack coat to the surface;**
 - 3. **Placement and compaction of asphalt concrete pavement; and,**

4. **Furnishing all labor, materials including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per "Square Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XXVIII. REMOVE AND REPLACE ASPHALT CONCRETE PAVEMENT

- A. Quantities and approximate sizes of "Remove and Replace Asphalt Concrete Pavement" areas will vary for each project.
- B. Inspector will designate and mark the remove and replace asphalt concrete pavement limits when preparing work request.
- C. Spalled or loose blocks of pavement and pavement cracks wider than 3/8" may be deemed justification for extending or adding new areas to the "Remove and Replace Asphalt Concrete Pavement". Contractor must notify the Inspector when the limits marked on the pavement appear incorrect. Inspector will notify Contractor of the decision within four hours of notification.
- D. Areas indicated for "Remove and Replace Asphalt Concrete Pavement" will be saw cut and excavated to the full depth of the existing asphalt concrete, a minimum of 4" on local streets and 6" on arterial and collector streets, to include aggregate base and/or native soil. Additional aggregate base and/or native soil will be removed to permit correction of a subsurface problem.
- E. Asphalt pavement will be removed to clean straight lines before replacement to ensure that all areas are accessible to equipment used to compact replacement materials. Subgrade will be compacted to a relative compaction of not less than ninety-five (95) percent.
- F. All materials removed will be disposed of outside of the right-of-way, which will be left with a clean and finished appearance.
- G. Prior to placement of asphalt concrete, a tack coat of SS-1h emulsified asphalt will be uniformly applied to all contact surfaces at a rate of 0.05 gallon per square yard.
- H. Asphalt concrete used for replacement of existing pavement will be AR-4000 and will conform to the provisions of OCPW Standard Plan 1805 and this Scope of Work.

Replacement will be made full depth with asphalt concrete. Depth of 4" or more requires two lifts.
- I. Asphalt concrete will not be placed when the atmospheric temperature is below 50 degrees Fahrenheit or during unsuitable.
- J. Contractor will notify Inspector, at the end of the working day when striping and/or stenciling are damaged as a result of asphalt concrete repairs.
- K. **Full compensation for conforming to requirements of "Remove And Replace Asphalt Concrete Pavement" including:**

1. **Saw cutting;**

2. **Removal and disposal of pavement, base material, and/or native soil;**
3. **Compaction of sub-grade;**
4. **Placement of tack coat;**
5. **Placement and compaction of asphalt concrete pavement; and,**
6. **Furnishing all labor, materials including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per "Square Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore. There are 10 pay items for this Section: price per "Square Foot" for 4", 6", 8", 10", and 12", for areas less than 100 S.F. or area greater than 100 S.F.**

XXIX. TYPE D1 ASPHALT CONCRETE CURB

- A. County may request replacement or installation of either 6" or 8" high asphaltic concrete curb conforming to the requirements of "Type D1 Curb" per OCPW Standard Plan 120-2
- B. Inspector will designate and mark location and limits for the curb and specify size as either 6" or 8" curb face.
- C. Prior to placing asphalt concrete on existing pavement, the area will be thoroughly cleaned by removing all dirt, moisture and other foreign matter, including washing as necessary, and will install a uniformly applied tack coat of SS-1h emulsified asphalt to all contact surfaces of the existing pavement at a rate of 0.05 gallon per square yard.
- D. Asphalt concrete for curbs will be AR-4000 or AR-8000 and will conform to the provisions of OCPW Standard Plan 1805 (see "Notes, Special Provisions and Miscellaneous Details").
- E. **Full compensation for conforming to requirements of "Type D1-Asphalt Concrete Curb" including:**
 1. **Removing existing asphaltic concrete curb (if necessary);**
 2. **Cleaning and preparing the surface location of the new curb;**
 3. **Applying the tack coat to the surface;**
 4. **Placement and compaction of asphalt concrete material using a machine specifically manufactured for asphalt concrete curb construction; and,**
 5. **Furnishing all labor, material including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered in Contract unit price bid per "Linear Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore. There are two pay items for this Section, price per Foot for 6" high curb and for 8" high curb.**

XXX. PAVE ROAD DITCHES 3 INCH

- A. Quantities and approximate sizes of pave road ditches will vary for each project.
- B. Inspector will designate and mark exact limits of each road ditch location to be paved.
- C. Contractor is responsible for reshaping or re-grading existing road ditches as necessary to ensure that water has positive flow in completed paved ditch and that compacted asphalt depth will be a minimum of 3" thick on all surfaces. Loose materials and all vegetation will be removed prior to beginning paving. Where additional fill material is required to shape the ditch prior to paving, it will be compacted to a relative compaction of not less than ninety (90) percent.
- D. All materials removed will be properly disposed of by Contractor and not left on County property. Completed project will be left with a clean and finished appearance.
- E. Prior to placement of asphalt concrete, a tack coat of SS-1h emulsified asphalt will be uniformly applied to all pavement contact surfaces at a rate of 0.05 gallon per square yard.
- F. Asphalt concrete used for paving road ditches will be AR-4000 or AR-8000 and will conform to the provisions of OCPW Standard Plan 1805 and this Scope of Work.
- G. Pavement will be made with a full depth of 3" with asphalt concrete.
- H. Asphalt concrete will not be placed when atmospheric temperature is below 50 degrees Fahrenheit or during unsuitable weather.
- I. Particular care will be taken to ensure the edge of new asphalt paved ditch adjacent to existing paved road edge is flush with existing pavement edge so as to not pond water on road pavement surface or create a drop off at end of road surface.
- J. Opposite edge of the road ditch will be slightly below the edge of adjacent ground surface to ensure positive run off into the paved ditch. Pavement edge may be between ½" and 1½" below existing ground surface.
- K. Invert of the paved ditch must be sloped to drain. The maximum depth of ponded water in finished paved invert is ½".
- L. **Full compensation for conforming to requirements of "Pave Road Ditches 3 Inch" including:**
 - 1. **Re-grading of existing earth ditch;**
 - 2. **Removal and disposal of all vegetation, trash debris, loose or excess soil;**
 - 3. **Refilling eroded areas of slope as necessary including furnishing material and re-compacting to 90%;**
 - 4. **Placement of a tack coat along edge of existing road pavement and other paved areas;**
 - 5. **Placement and compaction of asphalt concrete pavement; and,**

6. **Furnishing all labor, materials including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per "Square Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XXXI. REMOVE AND REPLACE EXISTING 3 INCH ROAD DITCHES

- A. Quantities and approximate sizes of "Remove and Replace Existing 3 Inch Road Ditches" areas will vary for each location.
- B. Inspector will designate and mark exact limits of each road ditch to be removed and replaced when preparing work request.
- C. Contractor is responsible for removing existing asphalt, reshaping or re-grading as necessary to ensure that water has positive flow in the completed paved ditch and that compact asphalt depth will be a minimum of 3" thick asphalt on all surfaces. Loose materials and all vegetation will be removed prior to beginning paving. Where additional fill is required to shape the ditch prior to paving it will be compacted to a relative compaction of not less than ninety (90) percent.
- D. All materials removed will be properly disposed of by Contractor and not left on County property. Completed project will be left with a clean and finished appearance.
- E. Prior to placement of asphalt concrete, a tack coat of SS-1h emulsified asphalt will be uniformly applied to all contact surfaces at a rate of .05 gallon per square yard.
- F. Asphalt concrete used to for replacement of paving road ditches will be AR-4000 or AR-8000 and will conform to the provisions of OCPW Standard Plan 1805 and this Scope of Work.
- G. Asphalt concrete will not be placed when atmospheric temperature is below 50 degrees Fahrenheit or during unsuitable weather.
- H. Particular care will be taken to ensure the edge of new asphalt paved ditch adjacent to existing paved road edge is flush with existing pavement edge so as to not pond water on the road pavement surface or create a drop off at the end of road surface.
- I. Opposite edge of road ditch will be slightly below edge of the adjacent ground surface to ensure positive run off into paved ditch. Pavement edge may be between 1/2" and 1 1/2" below existing ground surface.
- J. Invert of the paved ditch must be sloped to drain. The maximum depth of ponded water in finished paved invert is 1/2".
- K. **Full compensation for conforming to requirements of "Remove And Replace Existing 3 Inch Road Ditches" including:**
 1. **Saw cutting as necessary;**
 2. **Removal and disposal of pavement, base materials and/or native soil;**
 3. **Removal and disposal of all vegetation, trash debris, loose or excess soil;**

4. **Refilling eroded areas of slope as necessary including furnishing material and re-compacting to 90% relative compaction;**
5. **Placement of a tack coat along edge of existing road pavement and other paved areas;**
6. **Placement and compaction of asphalt concrete pavement; and,**
7. **Furnishing all labor and materials including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per "Square Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XXXII. PAVE ROAD SHOULDERS 4 INCH

- A. Quantity and approximate sizes of "Pave Road Shoulders 4 Inch" will vary from each project.
- B. Inspector will designate and mark exact limits of road shoulder to be paved.
- C. Areas indicated for paving of road shoulder will be excavated or reshaped and re-compacted as necessary to provide for 4" of compacted asphalt concrete. Subgrade will be compacted to a relative compaction of not less than ninety-five (95) percent.
- D. All materials removed will be properly disposed of by Contractor and not left on County property. Completed project will be left with a clean and finished appearance.
- E. Prior to placement of asphalt concrete, a tack coat of SS-1h emulsified asphalt will be uniformly applied to all pavement contact surfaces at a rate of 0.05 gallon per square yard.
- F. Asphalt concrete used for replacement of paving of road shoulder will be AR-4000 and will conform to the provisions of OCPW Standard Plan 1805 and this Scope of Work.
- G. Placement will be made full depth with asphalt concrete.
- H. Asphalt concrete will not be placed when atmospheric temperature is below 50 degrees Fahrenheit or during unsuitable weather.
- I. Contractor will notify Inspector at end of the working day when striping and/or stenciling are damaged as a result of asphalt concrete repairs.
- J. **Full compensation for conforming to requirements of "Pave Road Shoulders 4 Inch" including:**
 1. **Saw cutting as necessary;**
 2. **Removal and disposal of pavement, base material, and/or native soil;**
 3. **Compaction of sub-grade;**
 4. **Placement of tack coat along edge of existing road pavement and other paved areas;**

5. **Placement and compaction of asphalt concrete pavement; and,**
6. **Furnishing all labor and materials including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per "Square Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XXXIII. REMOVE AND REPLACE EXISTING 4 INCH ROAD SHOULDER

- A. Quantities and approximate sizes of "Remove and Replace Existing 4 inch Road Shoulder" areas will vary for each location.
- B. Inspector will designate and mark exact limits of each road shoulder to be removed and replaced when preparing work request.
- C. Areas indicated for removing and replacing of road shoulder will be excavated or reshaped and re-compacted as necessary to provide for 4" of compacted asphalt concrete. Subgrade will be compacted to a relative compaction of not less than ninety-five (95) percent.
- D. All materials removed will be properly disposed of by Contractor and not left on County property. Completed project will be left with a clean and finished appearance.
- E. Prior to placement of asphalt concrete, a tack coat of SS-1h emulsified asphalt will be uniformly applied to all contact surfaces at a rate of .05 gallon per square yard.
- F. Asphalt concrete used to for replacement of paving road shoulders will be AR-4000 and will conform to provisions of OCPW Standard Plan 1805 and this Scope of Work.
- G. Asphalt concrete will not be placed when atmospheric temperature is below 50 degrees Fahrenheit or during unsuitable weather.
- H. Contractor will notify Inspector at end of the working day when striping and/or striping and/or stenciling are damaged as a result of asphalt concrete repairs.
- I. **Full compensation for conforming to requirements of "Remove And Replace Existing 4 inch Road Shoulder" including:**
 1. **Saw cutting as necessary;**
 2. **Removal and disposal of pavement, base material, and/or native soil;**
 3. **Compaction of subgrade;**
 4. **Placement of tack coat along edge of existing road pavement and other paved areas;**
 5. **Placement and compaction of asphalt concrete pavement; and,**
 6. **Furnishing all labor and materials including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per "Square Foot" in accordance with**

this Scope of Work and no additional compensation will be allowed therefore.

XXXIV. FOG SEAL

- A. Quantities and approximated sizes of “Fog Seal” areas will vary for each project.
- B. Inspector will designate and mark exact limits of each area to be fog sealed.
- C. Fog seal will be SS-1h type emulsified asphalt and uniformly applied at a rate of 0.05 gallons per square yard to all exposed surfaces of existing asphalt concrete (such as berms, v-ditches, sidewalks, driveway approaches, etc.). All loose materials and vegetation will be removed prior to spraying.
- D. Fog seal will not be applied when atmospheric temperature is below 40 degrees Fahrenheit or when humidity is greater than 70 percent.
- E. **Full compensation for conforming to requirements of “Fog Seal” including:**
 - 1. **Removing all loose materials and vegetation;**
 - 2. **Cleaning and preparing the surface location;**
 - 3. **Applying fog seal to the surface; and,**
 - 4. **Furnishing all labor, materials including fog seal, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per “Square Foot” in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XXXV. CRACK REPAIR SEALANT MATERIAL

- A. Unless otherwise specified, asphalt rubber sealant material will be hot-applied, elastically modified asphalt, and will meet the following requirements:

Property	Test Specification	Requirement
Cone Penetration (@77 Degrees Fahrenheit)	ASTM D3407	15-45
Softening Point	ASTM D36	200 Degrees Fahrenheit
Resilience	ASTM D3407	30 percent
Ductility (77 Degrees Fahrenheit)	ASTM D113	30 Centimeters minimum

- B. Asphalt rubber sealant material will be accompanied by a certificate of compliance from the manufacturer.
- C. **This item to be used only in conjunction with crack repair routed or crack repair non-routed.**
- D. County reserves the right to furnish, at County expense, a different sealant material for particular applications.

XXXVI. CRACK REPAIR - ROUTED

- A. Quantity of "Crack Repair –Routed" will vary from each project. Inspector will supply estimated quantity only.
- B. Sealant will not be placed when pavement temperature is below 40 degrees Fahrenheit or during unsuitable weather.
- C. Cracks in size from 1/8" and greater in width will be widened using a router to form a sealant reservoir which is at least 1/2" wide and 3/4" to 1" deep. The routed crack will then be cleaned with compressed air to remove all dust and free moisture immediately prior to filling.
- D. Contractor will protect all existing utility covers, traffic loop detectors and pullboxes during routing operation and will repair or replace any damaged facilities to its original condition. Existing facilities will include but not be limited to the above items.
- E. All debris resulting from crack routing will be removed from the roadway by hand or mechanical sweeping prior to the end of each work day.
- F. Sealant will be placed to ensure the bottom of crack is filled first with sealant continuing to the pavement surface in a manner which does not result in sealant bridging or entrapping air pockets. With deep cracks, settlement may occur, thus requiring application of a second layer of sealant. Level of sealant will be allowed to be slightly below the level of existing pavement. All excess sealant will be removed from crack with a minimum overlap onto adjacent pavement.
- G. Contractor will furnish and spread sufficient sand necessary to eliminate tracking or damage to crack sealant. On all arterial highways where sand will be applied over fresh crack sealant, Contractor will post "Loose Gravel" (C6) construction signs. Signs will be posted from commencement of crack sealing until all sand has been cleaned from roadway. Contractor will remove all sand by sweeping within 24 hours after opening street to traffic.
- H. **Full compensation for conforming to requirements of "Crack Repair –Routed" including:**
 - 1. **Crack routing;**
 - 2. **Crack cleaning;**
 - 3. **Application of sealant; and,**
 - 4. **Furnishing all labor, materials, exclusive of sealant, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per "Linear Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XXXVII. CRACK REPAIR – NON-ROUTED

- A. Quantity of "Crack Repair: Non-Routed" will vary from each project. Inspector will supply estimated quantity only.
- B. County may, at its option specify an alternative method of crack cleaning and filling.

- C. Sealant will not be placed when the pavement temperature is below 40 degrees Fahrenheit or during unsuitable weather.
- D. Under this method cracks will be cleaned and dried by use of a high pressure hot air wand with a minimum pressure of 120 PSI heated to 350°F with all loose material blown from the crack and the adjacent pavement dried and heated to improve adhesion of the sealant. All loose material will be swept from pavement surface and disposed of by Contractor.
- E. Sealant will be placed while crack surface is still hot to increase adhesion of the sealant to existing pavement. Sealant will be placed to ensure the bottom of the crack is filled first with sealant continuing to pavement surface in a manner which does not result in sealant bridging or entrapping air pockets. With deep cracks, settlement may occur, thus requiring the application of a second layer of sealant. Level of the sealant will be allowed to be slightly below the level of existing pavement.
- F. All excess sealant will be removed from the crack with a minimum overlap onto adjacent pavement.
- G. Contractor will furnish and spread sufficient sand necessary to eliminate tracking or damage to crack sealant. On all arterial highways where sand will be applied over fresh crack sealant, Contractor will post "Loose Gravel" (CG) construction signs. Signs will be posted from commencement of crack sealing until all sand has been cleaned from roadway. Contractor will remove all sand by sweeping within 24 hours after opening the street to traffic.
- H. **Full compensation for conforming to requirements of "Crack Repair: Non-Routed" including:**
 - 1. **Crack cleaning and heating;**
 - 2. **Application of sealant;**
 - 3. **Removal of debris; and,**
 - 4. **Furnishing all labor, materials (exclusive of sealant) tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per "Linear Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XXXVIII. APPLICATION OF "PERCOL" SEALANT

- A. County may specify the application of "Percol" brand sealant for particular applications. This may include filling unusually wide cracks or as a surface treatment on the pavement to repair damaged pavement without disruption of traffic signal loops in the pavement. Application will be by personnel trained and qualified in the application of Percol.
- B. **Full compensation for conforming to the requirements of "Application Of "Percol" Sealant" including:**
 - 1. **Cleaning of the surface to be sealed, cracks and/or pavement surface;**
 - 2. **Application of "Percol" sealant; and,**

3. **Furnishing all labor, materials, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price per "Gallon" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XXXIX. UNTREATED BASE MATERIAL

- A. Untreated base will be used where directed by Inspector and/or Engineer to correct a subsurface problem or where required minor paving work justifies its use.
- B. Untreated base to be used for the base course under asphalt concrete pavement will conform to Section 200-2 and OCPW Standard Plan 1804.
- C. Payment for "Untreated Base Material" will be made at Contract unit price per TON which will include full compensation for furnishing all material required in accordance with the plans and these special provisions and no additional compensation will be allowed therefore. This item includes removal of native/existing material below the depth of excavation for new asphalt included.
- D. Quantity set forth in bid item for "Untreated Base Material" is an anticipated amount only to establish a unit price. No adjustment in compensation will be made in Contract unit price for "Untreated Base Material" regardless of the amount or reason for the increase or decrease in quantity of these items required. Provisions in Section 3-2, "Change Initiated by the Agency," of the Standard Specifications will not apply to the item of "Untreated Base Material".

XL. COLD MILLING OF ASPHALT CONCRETE PAVEMENT

- A. Quantities and approximate sizes of Cold Milling areas will vary for each project.
- B. Inspector will designate and mark exact limits of each area to be cold milled.
- C. Areas indicated for Cold Milling may be anywhere from 0" to 3" in depth.
- D. "Cold Milling of Asphalt Concrete Pavement" will be in accordance with Section 302-5-2 of the Standard Specifications.
- E. While all material removed by Cold Milling operations will be considered property of Contractor and disposed of by Contractor at his expense, County, at its option, may identify and offer disposal sites to Contractor when County has a potential for reuse of cold milled material. Contractor's use, at his option, of County disposal sites will not result in a change of unit price of "Cold Milling of Asphalt Concrete Pavement".
- F. **Full compensation for conforming to requirements of "Cold Milling Of Asphalt Concrete Pavement" including:**
 1. **Cold milling of asphalt;**
 2. **Removal of debris from work area; and,**
 3. **Furnishing all labor, materials including fog seal, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per "Square Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XLI. PAVEMENT REINFORCEMENT FABRIC

- A. Work will consist of placing reinforcing fabric over existing pavement and/or between layers of pavement on leveling course and overlay if specified on work order for a particular location.
- B. "Pavement Reinforcing Fabric" will conform to special provisions in OCPW Standard Plan 1808, to the Special Provisions and the following:
 - 1. Asphalt cutbacks will not be used in the asphalt binder
 - 2. Binder application should be accomplished with an asphalt distributor for all surfaces and will be applied at a temperature of not less than 295 degrees Fahrenheit, nor more than 325 degrees Fahrenheit, the exact temperature to be determined by the Inspector
 - 3. Fabric can withstand direct application of asphalt concrete up to 300 degrees Fahrenheit without shrinkage or damage. Asphalt concrete will be placed at as high a temperature as practicable, but will not exceed 300 degrees Fahrenheit

Note: Where the narrow strip of pavement reinforcing fabric is required over the joint between a concrete median curb and the asphalt pavement, a tack coat of 0.45 gallon per square yard of SS-1h may be used.

- C. Prior to placing pavement reinforcing fabric, all raised pavement markers will be removed.
- D. Pavement reinforcing fabric will be placed in standard 6½' wide and 12½' wide increments to most closely approximate actual pavement width, unless specifically designated on the plans or directed by the Inspector.
- E. Public traffic will not be allowed on the bare reinforcing fabric, except that public cross traffic will be allowed to cross the fabric, under traffic control, after Contractor has broadcast a small quantity of asphalt concrete over the fabric.
- F. Pavement reinforcement fabric will be measured for payment by the square yard of existing pavement covered and no payment will be made for laps.
- G. **Full compensation for conforming to requirements of "Pavement Reinforcement Fabric" including:**
 - 1. **Cleaning and preparing the surface location;**
 - 2. **Applying tack coat to surface;**
 - 3. **Placing fabric; and,**
 - 4. **Furnishing all labor, materials including fog seal, tools, equipment and incidentals necessary to perform work will be considered as included in Contract unit price bid per "Square Yard" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XLII. ASPHALT CONCRETE RAMP ON CONCRETE SIDEWALK

- A. County ramps raised sidewalk panels over ½” with asphalt concrete.
- B. Quantities and approximate sizes of Asphalt Concrete Ramp on Concrete Sidewalk areas will vary for each location.
- C. Inspector will designate and mark the area when preparing work request.
- D. Prior to placing asphalt concrete, area will be thoroughly cleaned by removing all loose and damaged materials, moisture, dirt and other foreign matter.
- E. Prior to placement of asphalt concrete, a tack coat of SS-1h emulsified asphalt will be uniformly applied to all contact surfaces at a rate of .05 gallon per square yard.
- F. Asphalt concrete used to ramp the sidewalk panel will be AR-4000 or AR-8000 and will conform to the provisions of OCPW Standard Plan 1805 and this Scope of Work.
- G. DELETE paragraph four of Subsection 302-5.5, “Distribution and Spreading”, and SUBSTITUTE the following:

Asphalt concrete will not be placed when the atmospheric temperature is below 50 degrees Fahrenheit or during unsuitable weather.

Contractor will furnish and spread sufficient sand necessary to eliminate tracking.

- H. **Full compensation for conforming to requirements of “Asphalt Concrete Ramp On Concrete Sidewalk” including:**
 - 1. **Cleaning and preparing the surface area to be ramped;**
 - 2. **Applying tack coat to surface;**
 - 3. **Placing and compacting the asphalt concrete pavement; and,**
 - 4. **Furnishing all labor and materials including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per “Square Foot” in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XLIII.PAVE ASPHALT CONCRETE SLOT WITHIN THREE (3) WORKING DAYS

- A. It is the responsibility of Contractor to fill in the asphalt slot area behind new concrete installation. Contractor will be notified by fax with location, square footage and depth and has three (3) days after notification to have the area backfilled with asphalt concrete (not including weekends or holidays). Quantities and approximate sizes of areas will vary for each location. Areas will be ready for new asphalt installation with no other work required, except in front of a drive approach where base material may be required to be removed. Contractor will notify Inspector upon completion so that barricades may be picked up.
- B. All materials removed will be properly disposed of by Contractor and not left on County property. Completed project will be left with a clean and finished appearance.

- C. Prior to placement of asphalt concrete, a tack coat of SS-1h emulsified asphalt will be uniformly applied to all contact surfaces at a rate of 0.05 gallon per square yard.
- D. Asphalt concrete used for PAVE AC SLOT will be AR-4000 and will, conform to provisions of OCPW Standard Plan 1805 and this Scope of Work.

Asphalt concrete will not be placed when the atmospheric temperature is below 50 degrees Fahrenheit or during unsuitable weather.

- E. **Full compensation for conforming to requirements of “Pave Asphalt Slot Within 3 Working Days” including:**
 - 1. **Removal and disposal of base material (as needed);**
 - 2. **Compaction of sub-grade;**
 - 3. **Placement of tack coat;**
 - 4. **Placement and compaction of asphalt concrete pavement; and,**
 - 5. **Furnishing all labor and materials including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price bid per “Square Foot” in accordance with this Scope of Work and no additional compensation will be allowed therefore. There are two pay items for this Section, price per Square Foot for 4” and 6” depths.**

XLIV. SPEED BUMP INSTALLATION

- A. There are occasions when speed bumps are requested by parks. Inspector will designate and mark each location where a speed bump is requested. Speed Bump exhibits that depict a sample style requested will be provided and actual placement will vary and be approved by Inspector.
- B. Prior to placing asphalt concrete on existing pavement, the area will be thoroughly cleaned by removing all dirt, moisture and other foreign matter, including washing as necessary, and will install a uniformly applied tack coat of SS-h emulsified asphalt to all contact surfaces of existing pavement at a rate of 0.05 gallon per square yard.
- C. This work shall conform to Section 302-5, “Asphalt Concrete Pavement,” of the Standard Specifications, OCPW Standard Plan 1805 and this Scope of Work.
- D. Asphalt concrete shall be C2-AR-4000.
- E. **Full compensation for conforming to requirements of “Speed Bump Installation” including:**
 - 1. **Removal and disposal of existing speed bump;**
 - 2. **Cleaning and preparing existing pavement for a new speed bump;**
 - 3. **Providing all traffic control;**
 - 4. **Forming and placing and compacting new asphalt concrete speed bump; and,**

5. **Furnishing all labor, materials, tools, equipment and incidentals necessary to perform work will be considered as included in Contract unit price bid per "Square Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XLV. SHOULDER RESHAPING

- A. Contractor will remove all vegetation and debris including paper, trash, tree limbs, branches, and leaves to expose underlying subgrade prior to reshaping subgrade adjacent to asphalt overlay
- B. Shoulders shall be graded, reshaped to a cross-slope of a 4 percent to six percent and sloped according to area available adjacent to pavement, or as directed by Inspector and compacted to 90 percent Relative Compaction. NOTE: Imported borrow material may be required for final reshaping. All imported borrow material will be of a quality suitable for road shoulder, i.e. a fine granular material free from rocks or objectionable material with enough clay for adequate binding but not so much as to be slippery when wet, free of vegetation or other unsatisfactory material. Neither cold mill grinding nor untreated base shall be used for shoulder reshaping material.
- C. If imported borrow material is to be placed for reshaping, existing areas for shaping will be scarified to provide a bond between the existing ground and the material deposited.
- D. **Full compensation for conforming to requirements of "Shoulder Reshaping" including:**
 1. **Removal of debris from work area;**
 2. **Grading, reshaping and compaction of subgrade;**
 3. **Placing suitable material; and,**
 4. **Furnishing all labor, materials, tools, equipment and incidentals required to perform work will be considered as included in Contract unit price per "Linear Foot" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XLVI. RUBBERIZED EMULSION-AGGREGATE SLURRY (REAS)

- A. General:
 1. Slurry seal with rubberized emulsion shall conform to the requirements of the Standard Specifications and Section 600-3, "Rubberized Emulsion – Aggregate Slurry," of the Standard Specifications for Public Works Construction, and this Scope of Work.
 2. Slurry seal with rubberized emulsion shall be "Flex Seal" slurry seal, manufactured by Petrochem Marketing, Inc., 3033 Washington Boulevard, Los Angeles, California, (323) 526-4078. An equal product such as Tire Rubber Modified Slurry Seal (TRMSS) can be substituted, subject to approval by the Engineer.
- B. Material:

1. The Rubberized Polymer Modified Emulsion (RPME) shall be slow-set emulsion and shall contain asphalt, crumb rubber, and polymer modifiers.
2. At the time of delivery of each shipment of RPME or REAS, the Contractor shall deliver to the County certified copies of the test report. The test report shall indicate the name of the vendor, type and grade of asphalt emulsion delivered, date and point of delivery, quantity delivered, delivery ticket number, purchase order number, latex brand, designation and rate mixed with the emulsified asphalt, and results of the specified tests. The test report shall be signed by an authorized representative of the vendor, shall certify that the product delivered conforms to the standard specifications and is compatible with the proposed aggregate. At the request of the Engineer, samples of the emulsion at the stockpile site or the plant will be tested to determine compliance with the above requirements. Testing shall be accomplished by an accredited materials testing laboratory approved by the Engineer. Records of the test results shall be provided to the Engineer and the testing required in connection with those results and all additional testing shall be provided by the Contractor at no cost to the County.
3. No material from that shipment of RPME or REAS shall be utilized or employed in performance of the work until the certified test reports and samples of the material have been furnished to, checked by, and approved by the Engineer to determine their conformity with the prescribed requirements. Delays by the Contractor in furnishing the required test reports will not be grounds for any extension of contract time.

4. Composition of REAS

Aggregate Type	RPME % of Dry Aggregate Weight	Residual RPME % of Dry Aggregate Weight	Pounds of Dry Aggregate per Gallon of RPME
Fine Slurry Aggregate	60 - 80	30 - 40	10.6 – 14.2
Type I Slurry Aggregate	50 - 75	25 - 38	11.3 – 17.0
Type II Slurry Aggregate	28 - 35	24 - 36	21.3 – 28.3

5. For continuous flow mixing, the Contractor shall schedule and coordinate the delivery of aggregate to the stockpile(s) such that: (1) deliveries originate at the plant and arrive at the stockpile site no earlier than 7:00 A.M. or later than 4:00 P.M. on the same calendar day, (2) delivery site and project name are explicitly stated on each delivery ticket, (3) successive deliveries on the same calendar day show the cumulative total for that day, (4) copies of all delivery tickets are delivered to the Engineer before the end of the working day, whereas any delivery tickets not so delivered may be rejected by the Engineer. Any deviation from this process must have the prior approval of the Engineer.
6. Type I aggregate shall be used.
7. Gradation of Aggregates

	% By	Weight Passing Sieve	Size
Sieve Size	Fine Slurry Aggregate	Type I Slurry Aggregate	Type II Slurry Aggregate
9.5mm (3/8 in.)	100	100	100
4.75mm (No. 4)	100	100	90 – 100
2.36mm (No. 8)	95 – 100	90 - 100	65 – 90
1.18mm (No. 16)	75 – 92	65 – 90	45 – 70
600 µm (No.30)	50 -75	40- 60	30 -50
300 µm (No. 50)	35 -50	25 – 42	18 – 36
150 µm (No 100)	15 -30	15 -30	10 – 24
75 µm (No. 200)	10 – 20	10 – 20	5 – 15

C. Mix Design:

1. At least 15 working days prior to starting the placement of slurry seal, the Contractor, at its expense, shall submit a current signed original of mix designs and the test results of the slurry components, which include aggregate, emulsion, water, and additives. Test results shall include Consistency Test, Set Time, Cure Time, and the Wet Track Abrasion Test (WTAT). All testing shall be performed with samples that are representative of the actual materials to be used.
2. All material testing and mix designs shall be performed by a qualified laboratory, approved by the Engineer, and capable of performing the applicable ASTM and California tests.
3. The laboratory report shall clearly show the proportions of aggregate, filler (minimum and maximum), water (minimum and maximum), residual percent asphalt based on dry weight of the aggregate, emulsion percent based on dry weight of the aggregate, designation, rate and method of mixing with the emulsion, additives required for an optimum slurry seal mix, and weight per gallon of REAS.
4. The Engineer will determine if the mix design is best suited to its needs, based upon the test results, including the content of emulsion and water needed to produce slurry with a maximum loss of 75 grams per square foot by WTAT. The standard WTAT template may be modified to a thickness of 3.18mm (0.125 in.), when using fine aggregate.
5. Once the proportions of materials to be used are approved by the Engineer, no substitution of other material will be permitted unless the materials proposed for substitution are first tested by the same approved laboratory that performed the mix design testing, and a laboratory report is submitted for the substituted design as specified above. Substituted materials shall not be used until the mix design for that material is approved by the Engineer.

6. Adjustments may be required during construction, based on field conditions. The Contractor shall obtain the Engineer's approval prior to any adjustments.

D. Mixing And Equipment:

1. For central mixing plant, combining of the RPME and aggregate in the mixing tank shall be in the presence of the Engineer. The tank shall be calibrated in gallons and equipped with load cells and a full sweep agitator capable of producing a homogeneous slurry mix. All storage tanks and delivery vehicles shall be equipped with an agitator. The REAS shall be delivered to the slurry site and spread directly behind the truck with a mechanical-type squeegee distributor, or the slurry may be pumped into smaller trucks equipped with mechanical-type squeegee distributors. All spreading equipment shall contain fog/water systems per 302-4.3.2. The mixing tank shall not be used to supply more than one job at a time.
2. The weight per gallon of REAS delivered to the spreader box shall be within 0.92 lbs/gal of the mix design.
3. A central mixing plant shall not be used for quick set REAS.
4. For continuous flow mixing, the mixing equipment shall be a multi-blade or spiral continuous-flow unit in good working condition. All units used on the project shall have a visual readout display and have the means to accurately meter the individual quantities of aggregate, water, emulsion, and additives being fed into the mixer. All feeding mechanisms must be continuous feed and proportioning must remain constant at all times.
5. Calibration for the introduction of emulsion into the mixer shall include pumping the emulsion to establish a volumetric consistency within 2.0 percent of the mathematical average of 3 runs of at least 300 gallons. Emulsion pumps shall be equipped with an electronic automatic shut-down device which activates and shuts down the belt feeder when the emulsion level is lowered.
6. Variable volume pumps shall be equipped with a lock and shall be locked following calibration.
7. Calibration for the introduction of aggregate into the mixer shall include the delivery of aggregate with the volumetric consistency that shall not exceed 2.0 percent of the mathematical average of 3 runs of at least 3 tons.
8. The belt delivering the aggregate to the pugmill shall be equipped with a device to monitor the depth of the aggregate being delivered to the pugmill. Said device for monitoring depth of aggregate shall automatically shut down the power to the aggregate belt feeder whenever the depth of aggregate is less than 70 percent of the target depth flow.
9. In the event that the metering devices stop working, the slurry units will stop the application of slurry until they are fixed.
10. The spreader box shall be equipped with flexible material in contact with the pavement and shall be maintained so as to prevent loss of slurry. It shall be adjustable to ensure a uniform controlled spread and be equipped with a mechanical or hydraulic type horizontal shifting device.

11. The mixture of slurry seal shall not bleed, ravel, separate, or show other signs of distress following its placement.
12. ADD the Section 600-3.3.1, "Field Mixing and Spreading Equipment Calibration," the following: The Contractor shall allow 14 days prior to the start of work for calibration and for all required testing at a location to be designated by the Engineer. The Contractor, at its expense, shall arrange for field samples to be obtained at the time of calibration by the same approved laboratory that performed the mix design testing.

E. Application:

1. The Contractor shall provide a coordinator, at least one competent and experienced slow-set man, and one competent experienced driver for the truck applying the slurry. The Contractor shall also provide sufficient laborers for any hand work and clean-up required ensuring proper progress of work.
2. The streets or lots to be slurried shall be closed from the time the application begins until the Engineer determines the mixture has achieved sufficient set to be opened to traffic. If possible, slurry seal shall be applied to tree shaded areas in the early morning to allow proper curing.
3. At the discretion of the Engineer, the placement of slurry seal may be suspended due to unsuitable weather, air or pavement temperature, or other conditions that are considered unfavorable for the prosecution of the work. The Contractor shall immediately comply with the written order for suspension by the Engineer, and work shall not be resumed until approved by the Engineer in writing.
4. The days during which the suspension of work is in effect shall not be considered as working days as defined in Section 6-7.3, "Contract Time Accounting," and the date of completion shall be extended accordingly. In the event of a suspension of work, the Contractor shall provide for satisfactory passage of traffic through any incomplete portions of the project. No adjustment of unit prices of any items or other increase compensation shall be allowed due to a suspension of work as described above.
5. Prior to applying slurry, all vegetation previously sprayed with an herbicide shall be removed from cracks in the pavement and joints between the pavement and concrete gutters by the Contractor. Prior to applying slurry, all raised pavement markers shall be removed by the Contractor. The surface to be sealed shall be cleaned by the Contractor by washing, heating, scraping, or other means necessary to remove moisture, dirt, grease, or other foreign matter which would reduce the bond between the slurry and the pavement. Immediately ahead of the slurry truck, the pavement shall be pre-wetted by a pressure water distribution system equipped with a fog type spray bar which will completely dampen the surface of the pavement. The rate of application will be determined by the Engineer based upon pavement conditions at the time of application.
6. Slurry shall be applied utilizing such equipment and methods such that no longitudinal or transverse ridges are noticeable either visually or in vehicle ride quality. All loose aggregate shall be removed by sweeping within 24 hours after application.

7. The Contractor shall repair, replace, or reseal all pavement areas which have not been properly or completely sealed, which have been damaged by traffic due to premature opening or softening from warm weather, or which develop bleeding, raveling, separation or other distress. All remedial repairs shall be completed within 14 days after notification by the Engineer and shall be completed at no cost to the County.
8. During slurry seal operations it shall be the Contractor's responsibility to thoroughly and adequately protect all manhole covers, water valve covers and utility vault covers, all survey "monumentation", and all drainage facilities. The Contractor shall employ all means necessary to protect and clean these existing facilities to their original condition or shall bear the cost to replace them where necessary.
9. Any manhole cover, water valve cover, utility vault cover or drainage facility cover found to be inadequately protected and cleaned shall be cleaned by means such as sandblasting to remove all slurry material (including material remaining from previous applications) from the metal surface or it shall be replaced by the Contractor at its expense.
10. A sand blotter shall be spread at selected driveways, intersections, or other areas designated by the Engineer to accommodate pedestrian or vehicular traffic until the slurry sets. Sand blotters used at intersections shall be swept within 14 hours of placement or sooner if directed by the Engineer. **Failure to remove sand blotters within 14 hours will result in removal by County forces and the costs of the removal charged to the Contractor**
11. The start and finish of a slurry application shall be a straight line which, unless otherwise approved by the Engineer, shall be obtained by laying a strip of building paper or other material, approved by the Engineer, on the pavement surface. After application of slurry, the paper shall be removed, leaving a straight edge.
12. Spillage resulting from hauling operations along or across any publicly travel way shall be removed immediately by the Contractor at its expense.
13. RPME Application Rates

Aggregate Type	Application Rate Square Feet /Gallon of RPME
Fine Slurry Aggregate	35 – 40
Type I Slurry Aggregate	28 – 35
Type II Slurry Aggregate	24 – 30

F. Field Sampling:

1. Quality assurance testing and sampling of the slurry seal mixture will be performed by the County of Orange OC Public Works Materials Laboratory, which shall include all the components necessary and required in the laboratory approved mix design.
2. The testing and sampling shall be performed by the County of Orange OC Public Works Materials Laboratory. The Engineer may, at any time during the project, suspend work in order to verify or interpret test results.

3. During the performance of the work, the Contractor shall arrange for taking at least 2 field samples of the mixed slurry per slurry truck, per day, for the purpose of wet track abrasion tests.
4. The slurry seal mixture sample shall be taken from the slurry truck by a qualified technician from the approved material testing laboratory.
5. Test results for the slurry seal mixture used during the course of the job will be based on random samples taken from the slurry seal truck at the time the material is being placed. These test results shall comply to the requirements of the wet track abrasion test, ASTM D3910, this Scope of Work, and the following values:

Test	Test Method	Requirement	
		Minimum	Maximum
Wet Track Abrasion (weight loss in grams per square foot)	ASTM D3910	0	75
Consistency (CMS)	ASTM D3910	20	30
Extraction Test (emulsion content, percentage)	ASTM D2172	± 1.0 Percent of mix design	
Water Content (percentage of dry aggregate weight)	ASTM D2172	---	25

Note: It is brought to the Contractor's attention that the results from the field sampling and testing will be compared to the results of the design testing performed prior to the starting of the job.

6. The slurry mixture sampled shall be of aggregate, asphalt emulsion, water, and additives, and shall be mixed in the slurry truck mixer and spreader or pre-mixed from the plant. It shall reflect the same slurry produced in the approved mix design and shall be prepared to a homogeneous flowing consistency and shall meet the requirements of the consistency test.
7. The slurry seal mixture sample taken from the slurry truck shall be formed into a disk by pouring it in the circular opening of a poly (methyl) methacrylate (PMMA) template resting on a larger circle of roofing felt.
8. The method for testing shall follow ASTM D3910, as follows: After removal of the template, the disk-shaped specimen is dried to constant weight at 140°F. The cured slurry is placed in a water bath for one hour, then mechanically abraded under water with a rubber hose for 5 minutes. The abraded specimen is washed free of debris, dried at 140°F and weighed. The loss in weight expressed as grams per square foot is reported as the wear value (WTAT loss).
9. For continuous flow mixing, the Contractor shall arrange and schedule an aggregate moisture test taken for each day of the slurry operation. Results of the test shall be submitted to the Engineer for review.
10. For continuous flow mixing, the Contractor shall perform an aggregate gradation

test (ASTM 136) for every 250 tons of aggregate used during the job.

11. For continuous flow mixing, the Contractor shall perform at least one sieve analysis test (ASTMD244) for each load of emulsion delivered to the job site. An additional sieve analysis test shall be performed on the first day for each work week that the job is in progress.

G. Measurement and Payment:

Payment for Slurry Seal-Type I will be made at the contract unit price per "Gallon" which shall include full compensation for furnishing the complete Rubberized Emulsion Aggregate Slurry (REAS) Type I material (including aggregate), all labor, materials, tools, equipment and incidentals required for all necessary property owner notification, posting of "No Parking" signs, traffic control, vegetation removal and street cleaning, mix design material testing and providing of mix design, mixing and placing REAS, sanding and sweeping for traffic access, removing excess slurry, repairing damaged or improperly cured slurry, securing and cleaning stockpile areas, and clean-up in accordance with this Scope of Work and no additional compensation will be allowed therefore.

XLVII. TRAFFIC LOOPS

- A. Traffic loop detector sensor units shall be furnished by the Contractor.
- B. The third paragraph in Section 86-5.01A(4), "Construction Materials," of the CALTRANS Standard Specifications is amended to read:
- C. Loop detector lead-in cable, from the pull box adjacent to the loop to the field terminals in the cabinet, shall conform to the DC resistance (ohms per 1,000 feet) specifications of ASTM Designation: B 286, or shall conform to the calculated cross sectional area in circular mils of ASTM Designation: B 286, Table 1. The lead-in cable shall conform to the following:
- D. Type A lead-in cable shall consist of 2 No. 12 solid copper conductors with each conductor insulated with 30 mils minimum, at any point, high molecular weight, heat-stabilized, colored polyethylene, conforming to the requirements of ASTM Designation: D1248, Type I, Class B, Grade 4. The conductors shall be twisted together with not less than 2 turns per foot; Non-Hygroscopic fillers shall be used to form a firm compact cylindrical core. A non-hygroscopic core tape shall be applied spirally over the core. The cable shall be provided with an outer jacket consisting of extruded, black polyvinyl chloride conforming to ASTM Designation: D1047. The cable shall conform to the International Municipal Signal Association's Specifications: 19.1.
- E. In lieu of the requirements in the fourth paragraph of Section 86-5.01A(5), "Installation Details," of the CALTRANS Standard Specifications, slots in asphalt concrete pavement shall be filled as follows:
- F. After conductors are installed in the slots cut in the pavement, paint binder shall be applied to all vertical surfaces of slots in accordance with the provisions in Section 94, "Asphaltic Emulsions," of the CALTRANS Standard Specifications. The slots shall then be filled with asphaltic concrete sealant.
- G. Temperature of sealant material during installation shall be above 70 degrees Fahrenheit. Air temperature during installation shall be above 50 degrees Fahrenheit. Sealant placed

in the slots shall be compacted by use of an 8-inch diameter by 1/8 inch thick steel hand roller or other tool approved by the Engineer. Compacted sealant shall be flushed with the pavement surface. Minimum conductor coverage shall be 5/8 inch. Excess sealant remaining after rolling shall not be re-used. Traffic may be released immediately over impacted materials.

- H. **Full compensation for conforming to requirements of “Traffic Loop” will be considered as included in the Contract unit price bid per “Each” and no additional compensation will be allowed therefore.**

XLVIII. IMPORTED BORROW

- A. Imported Borrow will conform to Section 300-5 of Standard Specifications and this Scope of Work. Material will be free of organic material and other deleterious substances.
- B. Material shall meet following grading limits when tested in accordance with California TM #202.

Sieve Size	% Passing
1”	100
¾”	85-100
# 4	50-100
# 30	15-35
# 200	5-20

- C. Material will have a sand equivalent of not less than 15 and not greater than 35 when tested in accordance with California TM #217.
- D. **Full compensation for conforming to requirements of “Imported Borrow” including:**
 - 1. **Clearing and stripping material sites, if necessary;**
 - 2. **Excavating, loading, hauling, depositing, spreading and compacting material, complete in place; and no adjustment for shrinkage, subsidence, or any other allowance will be made therefore; and,**
 - 3. **Furnishing all labor, materials, tools, equipment and incidentals required to perform work will be considered as included in Contract unit price per “Cubic Yard” in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

XLIX. ADJUSTMENT OF MANHOLE FRAME AND COVER

- A. There are occasions when utility manhole covers require adjustment in areas of current asphalt concrete operations or due to settlement.
- B. Inspector will designate and mark each manhole to be adjusted when preparing work request.
- C. Sewer and storm drain manhole frames within the area to be paved or graded will be set to finish grade by Contractor. Manholes in asphalt concrete pavement will be set to

finish grade in accordance with provisions of Subsection 302-5.8. In the case of Portland cement concrete pavement, manhole covers will be set to finish grade before paving. Repaving required as a result of reconstructing or adjusting all manhole and vault frames and covers to grade will be the responsibility of the Contractor and the cost thereof will be included in the bid item for pavement.

- D. Contractor will remove all debris from the interior of manholes and will clean all foreign material from the top of the frames and covers.
- E. Payment for preparing a sub-grade will be considered as included in the item of work for which the sub-grade is prepared.
- F. Adjusting manhole frames and covers to grade, where the difference between the lowest point of manhole removal and final elevation of the top of the frame is less than 375 mm (15 inches) or where the adjustment is accomplished by adjustment rings only, will be included in the unit price for adjusting each manhole frame.
- G. **Full compensation for conforming to requirements of "Adjustment Of Manhole Frame and Cover" including:**
 - 1. **Removal existing manhole cover and frame up to 15";**
 - 2. **Removal of debris from work area;**
 - 3. **Compaction of sub-grade;**
 - 4. **Adjustment of manhole cover; and,**
 - 5. **Furnishing all labor and materials including asphalt concrete, tools, equipment and incidentals necessary to perform the work will be considered as included in Contract unit price per "Each" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**
- L. **CREW RENTAL (3 MEN AND EQUIPMENT)**
 - A. County may request Contractor to perform asphalt maintenance operations outside scope of previous work items. Contractor will be given specific location and job description by Inspector and meet prior to any work being performed. Contractor shall furnish a three (3) man crew with equipment necessary to perform the requested work.
 - B. **Full compensation for conforming to requirements of "Crew Rental (3 Men And Equipment)" including:**
 - 1. **Supplying a 3 man crew with all necessary equipment;**
 - 2. **Cleanup, removal and disposal of debris; and,**
 - 3. **Furnishing all labor, materials, tools, equipment and incidentals necessary to perform work will be considered as included in Contract unit price bid per "Hour" in accordance with this Scope of Work and no additional compensation will be allowed therefore.**

LI. MISCELLANEOUS MATERIALS

- A. There may be occasion when County may request Contractor to supply materials to complete a project such as traffic loops or manholes.
- B. If this option is used, **Contractor will be required is to provide with invoice to County, a copy of supplier's invoice for any part costing \$100.00 or more.** Materials and supplies will be itemized separately on invoice.
- C. Cost of materials reported will be at invoice or lowest current price at which such materials are locally available and delivered to the job site in the quantities involved, plus sales tax.
- D. County reserves the right to approve materials and sources of supply, or to supply materials to the Contractor if necessary for the progress of the work. No markup will be applied to any materials provided by County.

**ATTACHMENT B
CONTRACTOR'S PRICING**

I. COMPENSATION: This is a usage Contract between County and Contractor for Asphalt Concrete Pavement Maintenance Services on an as needed basis, as set forth in Attachment A "Scope of Work".

Contractor agrees to accept the specified compensation as set forth in this Contract as full remuneration for performing all services and furnishing all staffing, labor, equipment, materials and incidentals required, for any reasonably unforeseen difficulties which may arise or be encountered in the execution of the services until acceptance, for risks connected with the services, and for performance by Contractor of all its duties and obligations hereunder. Contractor shall only be compensated as set forth herein below for work performed in accordance with the Scope of Work. **County shall have no obligation to pay any sum in excess of the Fixed Rates and Total Contract Amount specified herein unless authorized by amendment in accordance with Articles 30 and 44 of County Contract Terms and Conditions.**

II. FEES AND CHARGES: County will pay the following prices in accordance with the provisions of this Contract.

A. Schedule of Work Items: Prices shown are lump sum:

Item No.	Estimated Quantity	Unit Of Measure	Item Description	Item Price	Total
1.	5	EA	Emergency/On-Call Work	\$1,500.00	\$7,500.00
2.	2,500	SF	Hand Patch AC	\$1.50	\$3,750.00
3.	2,500	SF	Remove & Replace AC 4" < 100 SF	\$5.00	\$12,500.00
4.	15,000	SF	Remove & Replace AC 4" > 100 SF	\$5.00	\$75,000.00
5.	5,000	SF	Remove & Replace AC 6" < 100 SF	\$6.00	\$30,000.00
6.	15,000	SF	Remove & Replace AC 6" > 100 SF	\$6.00	\$90,000.00
7.	4,000	SF	Remove & Replace AC 8" < 100 SF	\$7.50	\$30,000.00
8.	12,000	SF	Remove & Replace AC 8" > 100 SF	\$7.50	\$90,000.00
9.	500	SF	Remove & Replace AC 10" < 100 SF	\$9.00	\$4,500.00
10.	5,000	SF	Remove & Replace AC 10" > 100 SF	\$9.00	\$45,000.00

Item No.	Estimated Quantity	Unit Of Measure	Item Description	Item Price	Total
11.	500	SF	Remove & Replace AC 12" < 100 SF	\$10.00	\$5,000.00
12.	2,500	SF	Remove & Replace AC 12" > 100 SF	\$10.00	\$25,000.00
13.	500	LF	Type D1 Asphalt Concrete Curb 6"	\$8.00	\$4,000.00
14.	500	LF	Type D1 Asphalt Concrete Curb 8"	\$10.00	\$5,000.00
15.	2,000	SF	Pave Road Ditches 3"	\$2.50	\$5,000.00
16.	2,500	SF	Remove & Replace Existing 3" Road Ditches	\$3.00	\$7,500.00
17.	2,000	SF	Pave Road Shoulders 4"	\$3.00	\$6,000.00
18.	2,500	SF	Remove & Replace Existing 4" Road Shoulders	\$4.00	\$10,000.00
19.	18,000	SF	Fog Seal	\$0.10	\$1,800.00
20.	1,500	LF	Crack Repair-Routed	\$1.00	\$1,500.00
21.	12,000	LF	Crack Repair-Non-Routed	\$0.65	\$7,800.00
22.	50	GAL	Application of "Percol" Sealant	\$50.00	\$2,500.00
23.	100	TON	Untreated Base Material	\$45.00	\$4,500.00
24.	4,000	SF	Cold Milling of AC Pavement	\$2.00	\$8,000.00
25.	1,500	SY	Pavement Reinforcement Fabric	\$1.00	\$1,500.00
26.	250	SF	AC Ramp on Concrete Sidewalk	\$4.00	\$1,000.00
27.	800	SF	Pave AC Slot Within 3 Days-4"	\$8.50	\$6,800.00
28.	2,000	SF	Pave AC Slot Within 3 Days-6"	\$9.00	\$18,000.00

Item No.	Estimated Quantity	Unit Of Measure	Item Description	Item Price	Total
29.	1,500	SF	Speed Bump Installation	\$2.00	\$3,000.00
30.	800	LF	Shoulder Reshaping	\$3.00	\$2,400.00
31.	5,000	GAL	Slurry Seal-Type I	\$7.00	\$35,000.00
32.	15	EA	Traffic Loops	\$500.00	\$7,500.00
33.	250	CY	Imported Borrow	\$6.00	\$1,500.00
34.	5	EA	Adjust Manhole Frame & Cover	\$500.00	\$2,500.00
35.	50	HR	Crew Rental (3 Men & Equipment)	\$375.00	\$18,750.00
TOTAL AMOUNT:					\$579,800.00

B. Materials Contractor cost plus 10 % mark up

1. Material costs will be paid to Contractor on the basis of Contractor's actual invoice cost plus mark up.
2. All material items shall be listed on the invoice
3. Contractor must provide Materials invoice for items \$100 or more

C. **TOTAL CONTRACT AMOUNT SHALL NOT EXCEED:** \$ **720,000**

III. PRICE INCREASES/DECREASES: No price increases will be permitted during the first period of the Contract. All price decreases will automatically be extended to County. County requires bona fide proof of cost increases on Contracts prior to any price adjustment. A minimum of one hundred twenty (120) days advance notice in writing is required to secure such adjustment. No retroactive price adjustments will be considered. County may enforce, adjust, negotiate, or cancel escalating price Contracts or take any other action it deems appropriate, as it sees fit. The net dollar amount of profit will remain firm during the period of the Contract. Adjustments increasing Contractor's profit will not be allowed.

IV. FIRM DISCOUNT AND PRICING STRUCTURE: Contractor guarantees that prices quoted are equal to or less than prices quoted to any other local, State or Federal government entity for services of equal or lesser scope. Contractor agrees that no price increases shall be passed along to County during the term of this Contract not otherwise specified and provided for within this Contract.

V. PAYMENT TERMS: Invoices are to be submitted in arrears, after services have been received. Payment will be net 30 days after receipt of an invoice in a format acceptable to the County of Orange. Invoices shall be verified and approved by County and subject to routine processing requirements. The responsibility for providing an acceptable invoice to County for payment rests

with Contractor. Incomplete or incorrect invoices are not acceptable and will be returned to Contractor for correction.

Billing shall cover services not previously invoiced. Contractor shall reimburse the County of Orange for any monies paid to Contractor for services not provided, or when services do not meet the contract requirements.

Payments made by County shall not preclude the right of County from thereafter disputing any items involved or billed under this contract and shall not be construed as acceptance of any part of the services.

VI. INVOICING INSTRUCTIONS: Contractor will provide an invoice on Contractor's letterhead. Each invoice will have a unique number and will include the following information:

- A. Contractor's name and address
- B. Contractor's remittance address, if different from (A), above
- C. Name of County agency/department
- D. Delivery/service address
- E. Contract number
- F. Service Date
- G. Description of Services/Locations
- H. Number of Catch Basins Cleaned
- I. Total Amount
- J. Taxpayer ID number

Invoices and support documentation are to be forwarded to:

OC Public Works/OC Operations & Maintenance
Attn: Kris Ruiz
2301 North Glassell Street
Orange, Ca 92865

**ATTACHMENT C
PERMITS**

I. GENERAL – PERMITS, LICENSES AND AGREEMENTS

The Contractor shall be responsible for identifying and obtaining all permits and licenses required for this project. Cost and fees associated with said permits regardless of whether obtained by the County, City or by Contractor, shall be borne solely by the Contractor.

The Contractor shall comply with all rules and regulations included in said permits and licenses. Should the Contractor fail to conform to said rules and regulations, the County reserves the right to perform the work necessary to conform to the rules and regulations. The cost of such work will be deducted from any monies to become due to the Contractor.

It is noted that multiple permits are required from the various regulatory agencies. Contractor is to abide by and follow the requirements of all such permits.

II. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS

A. The County is subject to two Municipal NPDES Permits which authorize the discharge of storm water from its municipal separate storm sewer system (MS4). The MS4 Permits, reissued by the Santa Ana and San Diego Regional Water Quality Control Boards in 2009, are now in their fourth terms. They both require the County to prepare and update a Stormwater Program Local Implementation Plan (LIP) which details how compliance with requirements of the MS4 Permits will be maintained.

B. The Contractor is directed to read thoroughly and comply with all requirements of Section A-8, Construction, of the County's LIP. A copy of Section A-8 of the LIP may be found on the internet at:

www.ocwatersheds.com/documents/damp/lip

C. The Contractor is responsible for selecting, implementing and maintaining an effective combination of construction BMPs on all projects from the 2009 California Stormwater Quality Association (CASQA) Construction Handbook Web Portal which is available through a subscription service at the following internet link:

<https://www.casqa.org/store/products/tabid/154/p-167-construction-handbookportal-initial-subscription.aspx>

D. The Contractor is responsible for complying with all locally enforced water quality related codes and ordinances. It should be noted there may be multiple cities/districts with jurisdiction over public right of way within the Project limits, and it is the Contractor's responsibility to make sure that activities related to the construction project do not cause violations of local laws.

III. CONSTRUCTION RELATED DEWATERING & DE MINIMUS DISCHARGES

A. San Diego Region:

On March 12, 2008, the San Diego Regional Board adopted Order No. R9-2008-0002, General Waste Discharge Requirements and NPDES Permit No. CAG919002 for discharges from groundwater extraction waste to surface waters within the San Diego Region except for San Diego Bay.

A copy of this document may be found on the internet at:

http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2008/2008_00_02.pdf

The Contractor is hereby directed to read it thoroughly and comply with the requirements as specified therein.

The Contractor is hereby notified that the permit is subject to a ninety (90) day lead time notification. The County will undertake all effluent monitoring, sampling, and reporting to the California Regional Water Quality Control Board, San Diego Region as required by the permit. The Contractor shall coordinate with the Engineer for the submittal of the permit application, including: the Notice of Intent; Initial Sampling and Monitoring Report; groundwater dewatering extraction system plans and sampling, monitoring, & treatment strategies to comply with the permit requirements; and payment of all permit fees. The Contractor shall comply with all requests from the County for construction and location of sampling stations; construction of settling/stilling basins; and any other mitigation measures required to conform to the permit conditions and requirements in the Agreement. A copy of the Agreement must be kept on the jobsite at all times and made available to any Department representative at their request.

B. Santa Ana Region:

The County has been issued Municipal NPDES Permit No. CAS618030, Order No. R8-2009-0030, from the California Regional Water Quality Control Board, Santa Ana Region. Section III.3.ii. of this permit authorizes de minimus types of discharges listed in the Santa Ana Regional Board's General de minimus Permit for Discharges to Surface Waters, Order No. R8-2009-0003, from County owned and/or operated facilities and activities (including construction), outside of the Newport Bay watershed.

A copy of the Municipal NPDES Permit (Order No. R8-2009-0030) may be found on the internet at:

http://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2009/09_030_oc_stormwater_ms4_permit.pdf

A copy of the Santa Ana Regional Board's General de minimus Permit for Discharges to Surface Waters (Order No. R8-2009-0003) may be found on the internet at:

http://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2009/09_003_deminimus_permit_wdr.pdf

For de minimus discharges outside of the Newport bay Watershed, the Contractor is hereby directed to read and thoroughly comply with the language in Section III.3.ii. of the County's Municipal NPDES Permit (Order No. R8-2009-0030) and to consult the General de minimus Permit (Order No. R8-2009-0003) for the types of de minimus discharges which are covered.

ATTACHMENT D

I. SUB-CONTRACTOR(S):

In accordance with Article 35, "Assignment or Sub-Contracting", listed below are Sub-contractor(s) anticipated by Contractor to perform services specified in Attachment A.

Company Name & Address	Contact Name, Telephone and Email Address	Division of Work or Trade
None		