DIVISION 01000 - GENERAL REQUIREMENTS

01000.01 DESCRIPTION OF WORK

The Contractor shall furnish, in accordance with these Specifications and Drawings, all plant, labor, equipment, and materials required for the grading, placing, compacting and paving of existing roads and placement of drainage as indicated in these plans and specifications.

The work consists of preparing the existing dirt road; pulverizing existing asphalt re-using the grindings by placing them and using them as base surfacing; and placing new asphalt pavement (PG 64-14) to a compacted thickness of 3 inches on prepared subgrade/base. Restore all driveway transitions, intersections and drainage flow lines. Roads will generally follow a 2% cross fall in one direction of pavement with the exception of drain crossings where the pavement will cross slope to the down stream-side. Width of road averages 16-17 feet.

01000.02 COMPLETION OF WORK

All work under this project shall be completed within 90 calendar days after the date of written Notice to Proceed issued by the Owner.

01000.03 WORKING SPACE

The Contractor shall limit his work activities, including the temporary storage of materials and excavated dirt inside any Owner's rights-of-way and temporary construction easements. Where not shown on the Drawing and within street rights-of-ways, the Contractor shall limit the area to be disturbed and shall keep streets open for local traffic at all time. The Contractor shall coordinate with Property Owners and the District in scheduling of work tasks to avoid possible interference during construction activity. Emergency access shall always be made available to residents, emergency personnel and/ or their equipment. Contractor may acquire with separate written permission by any land owner to temporarily store materials and/or equipment on their property. This shall be done without any cost or compensation by the District.

01000.04 PRECONSTRUCTION MEETING

Following award of contract but prior to commencement of work, the Contractor shall meet with the Representatives of the Office of Special Districts and County Service Area 59 staff and shall furnish the following items:

- A schedule of completing the principal items of work.
- A list of names, titles, addresses, and telephone numbers of the Contractor's responsible personnel indicating those who may be reached outside of the normal working hours for emergency purposes.

NOT FOR BID

01000.05 CONSTRUCTION UTILITIES

(a) POTABLE WATER: All drinking water on the site during construction shall be furnished by the Contractor and shall be bottled water or water furnished in approved dispensers.

(b) CONSTRUCTION WATER: The Contractor shall obtain construction water at no cost to the District. Water shall be obtained from the appropriate water jurisdiction providing water to the specific project area. Any meter charges, permits or costs associated with construction water are at the expense of the contractor.

(c) SANITARY FACILITIES: The Contractor shall provide adequate temporary toilet and washing facilities for his workmen. The Contractor shall maintain such facilities in a sanitary condition throughout the construction period. After construction is complete, the temporary facilities shall be removed and the premises disinfected, as required.

01000.06 PERMITS AND LICENSE

As the roads are in the jurisdiction of the District, encroachment and construction permits are waived. At his own expense, the Contractor shall apply and obtain all other permits and licenses required for the execution of work under this Contract such as moving permits required by CALTRANS, County Transportation Department, etc.

Water Pollution Control

Description – This section covers the contract item Water Pollution Control. The contract item Water Pollution Control shall include preparing and implementing the erosion control BMPs during construction. The identified BMPs shall be practices designed to minimize or eliminate the discharge of pollutants from the construction site and Contractor's construction activities, including, but not limited to:

1. Good housekeeping practices for solid and sanitary/septic waste management, vehicle and equipment cleaning/maintenance, and material handling and storage.

2. Construction procedures such as stabilized construction access points, scheduling/phasing to minimize areas of soil disturbance, soil stabilization and erosion/sediment control.

Payment - The contract lump sum price paid for Water Pollution Control, Prepare and Implementing erosion control measures include full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved in developing, preparing, and installing, constructing, maintaining, removing and disposing of BMPs, as specified in the CASQA Handbooks and Sample Contractor's Water Quality CSMP, General Permit and these Detailed Specifications, and as directed by the District.

Payment will be made on a basis of the percentage of work completed on the entire project.

01000.07 PROTECTION OF EXISTING UTILITIES

NOT FOR BID

The Contractor shall exercise his best effort and care to protect existing utilities (water lines, gas mains, sewer lines and manholes, power poles, etc.) against damage from his operations. All damages shall be repaired by the Contractor at his own expense. Contractor shall raise all water and gas valve cans during course of paving and set the cans to final grade. Contractor shall contact Underground Service Alert at least 48 hours prior to commencement of any work, (800) 422-4133.

01000.08 ACCIDENT PREVENTION

It shall be required that precautions shall be exercised at all times for the protection of any and all persons (including employees) and property and that the safety provisions of applicable laws, building, construction and traffic codes shall be observed and that all machinery, equipment, and all hazards shall be guarded or eliminated in accordance with the safety provisions of the Manual of Accident Prevention in Construction published by the Associated General Contractor of America, to the extent that such provisions are not in contravention of applicable laws.

01000.09 CONSTRUCTION STAKING

Construction staking will be provided by the District if needed.

The Contractor shall preserve all existing lot, property or survey stakes, markers, or monuments as they exist in the field. The Contractor shall be responsible for the disturbance, removal, or covering of existing lot stakes and shall at his own expense pay for all costs incurred for the proper replacement of said lot stakes or monuments. Only Licensed Land Surveyor or Registered Civil Engineer of the State of California shall be employed to restore or replace the disturbed property monuments. Tying-out the disturbed monuments by the contractor will not be acceptable as a permanent solution.

01000.10 MATERIALS

Contractor shall use only new materials contemplated for the execution of the work. Asphalt shall be plant batched with the proper ratio of oil, aggregate, sand and any other binder material needed as specified in section 02610. Materials shall be delivered in a timely manner to avoid cooling; placed by proper paving machines that are self-propelled, having heated screed bars and are in good working condition; rolled at least three times with a minimum of 8-ton steel drum rollers to achieve proper compaction. Material cut sheets shall be supplied by the batch plant and presented to Engineer for approval prior to commencement of the work.

01000.11 COMPACTION TESTING

If necessary, District shall employ and pay for the services of a soil engineer to take appropriate compaction tests in the preparation of fill areas and the base/subgrade and ensure that the relative compaction is maintained throughout the work area and is at least a 90% on all subgrade surface and 95% on all base section. Minimum amount of tests shall be at 500 foot intervals unless failing tests are obtained at which additional tests will be taken at least within 100 feet of such failing test(s) after the area has been satisfactorily re-worked. Any re-tests of failed areas shall be borne and paid for by the contractor.

NOT FOR BID

01000.12 ADJUST SEWER MANHOLE TO FINAL GRADE

Adjust Sanitary Sewer Manhole to Final Grade shall include all work necessary to adjust the sanitary sewer manhole rim and cover from its current grade to the final grade shown per the plans and specifications, these specifications, and Big Bear City CSD requirements.

Adjust Sanitary Sewer Manhole to Final Grade shall include excavation and backfill, and adjusting the sanitary sewer manhole to final grade elevations in accordance with Big Bear City CSD standards.

Work includes all correspondence with Big Bear City CSD for completion of the work.

The contract unit price paid for Adjust Sanitary Sewer Manhole to Final Grade shall include the per each price to include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in adjusting the manhole, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer with no additional compensation allowed

01000.13 ADJUST WATER VALVE COVER TO FINAL GRADE

Adjust Water Valve Cover to Final Grade shall include all work necessary to adjust the water valve box from its current location to the final location and grade shown on the plans and in accordance with Big Bear City CSD standard plans and specifications and these specifications.

Adjust Water Valve Cover to Final Grade shall include excavation and backfill, and adjusting the water valve box to final grade elevations in accordance with Big Bear City CSD standards.. Work also includes coordination with Big Bear City CSD for the completion of the work.

The contract unit price paid for Adjust Water Valve Cover to Final Grade shall include the per each price to include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in adjusting the water valve to grade, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer with no additional compensation allowed.

NOT FOR BID

END OF SECTION

DIVISION 02200 - EARTHWORK

02200.01 GENERAL

(a) The Contractor shall perform all earthwork required for construction of the proposed improvements as specified and shown.

(b) Earthwork includes all plant, labor, equipment, and materials as required or necessary to clear, grub, excavate, pulverized asphalt, trench, fill, backfill and grade for the construction of all structures, pipe lines, ditches, embankments, roadways and graded areas. Specifically grading the roadways and compacting prepared subgrade and base.

(c) The contractor's attention is directed to the possible existence of pipe and other underground improvements. All reasonable precautions shall be taken to preserve and protect any such improvements whether shown on the plans or not. Where it is necessary to remove and replace or to relocate such improvements in order to prosecute the work, they shall be removed, maintained and permanently replaced following review by District Representatives and owners of the utility.

(d) Earthwork within the rights-of-way of the State Division of Highways, the County Road Department, and City or other governmental agency (Bureau of Land Management), having jurisdiction, work shall be done in accordance with the requirements and the provisions of the permits issued by those agencies for the construction within their respective rights-of-way. Such requirements and provisions, where applicable, shall take precedence and supersede the provisions of these specifications. These technical specifications shall be the minimum requirement.

(e) In addition to the requirements herein set forth for piping and structural earthwork, all work shall be in accordance with the requirements of the County grading ordinance or ordinance of any other agencies having jurisdiction.

02200.02 EXCAVATION

(a) GENERAL. Except when specifically provided to the contrary, excavation shall include the removal of all materials of whatever nature encountered, including all obstructions of any nature that would interfere with the proper execution and completion of the work. The removal of said materials shall conform to the lines and grades shown or ordered.

Unless otherwise provided, the areas of construction shall be stripped of all vegetation and debris, and such material shall be removed from the site prior to performing any excavation or placing any fill. Excavated material suitable for backfill shall be stored temporarily in such a manner as will facilitate work under the Contract. Any damage done to private property by reason of work on easements shall be the responsibility of the Contractor. Fences and landscaping which are removed or damaged by the Contractor shall be restored to their original condition at the Contractor's expense.

The Contractor shall furnish, place, and maintain all supports and shoring that may be required for the sides of the excavations, and all pumping, ditching, or other approved measures for the removal or exclusion of water, including taking care of storm water reaching the site of work from any source as to prevent damage to the work or adjoining property.

NOT FOR BID

Excavations shall be sloped or otherwise supported in a safe manner in accordance with applicable State and Federal industrial safety requirements, and as reviewed by the Engineer. All excavations shall be performed, protected, and supported as required for safety and in the manner set forth in the operating rules, orders and regulations prescribed by the Division of Industrial Safety of the Department of Industrial Relations of the State of California. Barriers shall be placed at each end of all excavations and at such places as may be necessary along excavations to prevent accidents. Lights shall also be placed along excavations from sunset each day to sunrise of the next day until such excavation is entirely refilled.

(b) PIPELINE TRENCH EXCAVATION

(1) GENERAL. Unless otherwise show or ordered, excavation for pipelines, fittings, valves, and appurtenances, shall be open-cut trenches. The bottom of the trench shall have a minimum width equal to the outside diameter of the pipe plus 12 inches and a maximum width equal to the outside diameter of the pipe plus 20 inches. Except when otherwise shown or ordered by the Engineer, the bottom of the trench shall be excavated uniformly to the grade of the bottom of the pipe. The trench bottom shall be given a final trim using a string line for establishing grade, such that each pipe section when first laid will be continually in contact with the ground along the extreme bottom of the pipe. Rounding out the trench to form a cradle for the pipe will not be required.

The maximum amount of open trench permitted in any one location shall be 500 feet, or the length necessary to accommodate the amount of pipe installed in a single day, which ever is greater. All trenches shall be fully backfilled at the end of each day or, in lieu thereof, when reviewed by the Engineer, heavy steel plate adequately braced and capable of supporting vehicular traffic may be used in certain locations where it is impractical to backfill at the end of each day. The above requirements for backfilling or use of steel plate will be waived in cases where the trench is located further than 100 feet from any traveled roadway or occupied structure. In such cases, however, barricades and warning lights satisfactory to the Engineer shall be provided and maintained.

(2) TRENCH OVER-EXCAVATION WHERE SHOWN. Trenches shall be over excavated where shown, to the depth shown, then backfilled to the grade of the bottom of the pipe with suitable selected granular material or with sand. Said backfill shall be brought to optimum moisture content and compacted to 95 percent of maximum dry density where the pipeline trench passes under structures, and 90 percent elsewhere. Work specified in this Subsection shall be performed by the Contractor at his own expense.

(3) TRENCH OVER-EXCAVATION WHEN ORDERED. Trenches shall be over-excavated beyond the depth shown, when ordered by the Engineer in areas where pool soil (soft, spongy, or unstable material) or rock is encountered. Such over-excavation shall be to the depth ordered. The trench then shall be refilled to the grade of the bottom of the pipe with either selected granular material obtained shall be well-graded material of 1-1/2-inch maximum size. Bedding material shall be placed in layers, brought to optimum moisture content, and compacted to 95 percent of maximum dry density where the pipeline trench passes under structures, and 90 percent elsewhere. All work specified in this Subsection shall be performed by the Contractor at his own expense when the over-excavation ordered by the Engineer is less than 6-inches below the limits shown. When the over-excavation ordered by the Engineer is 6- inches or greater below the limits shown, additional payment will be made to the Contractor for that portion of the work which is located below the said 6-inch distance. Said additional payment will be made under a separate unite price bid item for over-excavation and bedding if such bid item has been established; otherwise payment will be made in accordance with a negotiated price for execution of a change order.

NOT FOR BID

(c) EXCAVATION BENEATH STRUCTURES. Except where otherwise specified for a particular structure or ordered by the Engineer, excavation shall be carried to the grade of the bottom of the footing or slab. Where shown or ordered, areas beneath structures shall be over-excavated. When such over-excavation is shown on the drawings, both over-excavation and subsequent backfill to the required grade shall be performed by the Contractor at his own expense. When such over-excavation and any resulting backfill will be paid for under a separate unit price bid item if such bid item has been established; otherwise payment will be made in accordance with a negotiated price. After the required excavation or over-excavation has been completed, the exposed surface shall be scarified to a depth of 6 inches, brought to optimum moisture content, and rolled with heavy compaction equipment to 95 percent of maximum dry density.

(d) SITE GRADING. After stripping has been done, all areas covered by the work, including excavated and filled section shall be graded uniformly to the lines and grades indicated on the drawings or as ordered. The finished surface shall be reasonably smooth and well compacted. All excavated or pulverized asphalt material suitable for fill shall be transported to and placed in the pavement area within the limits of the work.

All excavated materials which are unsuitable for fill shall be disposed of by the Contractor at his own expense. During construction, excavation and filling shall be performed in a manner and sequence that will provide drainage at all times.

Ditches shall be cut accurately to the cross-sections and grades indicated. Any excessive ditch excavation shall be back-filled to grade either with suitable, thoroughly compacted material, or with suitable stone or cobble to form an adequate paving.

(e) OVER-EXCAVATION NOT ORDERED, SPECIFIED, OR SHOWN. Any over-excavation carried below the grade ordered, specified, or shown, shall be refilled to the required grade with suitable selected granular material. Such material shall be moistened as required and compacted to 95 percent of maximum dry density under structures, and 90 percent elsewhere. Such work shall be performed by the Contractor at his own expense.

(f) EXCAVATION IN LAWN AREA. Where pipeline excavation occurs in lawn areas, the sod shall be carefully removed and stockpiled to preserve it for replacement. Excavated material from the trench may be placed on the lawn provided a drop cloth or other suitable method is employed to protect the lawn from damage. The lawn shall not remain covered for more than 72 hours. Immediately after completion of backfilling and testing of the pipeline, the sod shall be replaced in a manner so as to restore the lawn as near as possible to its original condition.

(g) EXCAVATION IN VICINITY OF TREES. Trees and other natural growths outside the actual lines of construction operations shall not be destroyed and such measures as are necessary shall be taken by the Contractor for the protection thereof. Trees shall be supported during excavation as may be directed by the Engineer. In the installation of pipe lines outside of public rights of way or in easements, trees shall not be removed and no tree roots over 2-inches in diameter shall be cut without express permission of the Engineer.

NOT FOR BID

(h) ROCK EXCAVATION AND BLASTING. Rock excavation shall include removal and disposal of the following: (1) all boulders measuring 1/3 of a cubic yard or more in volume; (2) all rock material in ledges, bedding deposits, and unstratified masses which cannot be removed without systematic drilling and blasting; (3) concrete or masonry structures which have been abandoned; and (4) deposits which are so firmly cemented that they possess the characteristics of solid rock and which cannot be removed without systematic drilling and blasting. Said rock excavation shall be performed by the Contractor at his own expense, provided that should the quantity of rock excavation be affected by any change in the scope of the work, an appropriate adjustment of the contract price will be made under a separate additive-deductive bid item if such bid item has been established: otherwise payment will be made in accordance with a negotiated price. All operations, storage and handling of explosives shall be according to provisions of Division II, Part I, of the Health and Safety Code, State of California, and shall comply with all State, County and local laws. Drilling and blasting are to be done only by personnel skilled in such operations. All necessary precautions shall be taken for protection of life and property. Warnings shall be given to nearby property owners that blasting is in progress. Safety mats shall be used to restrict flying particles. The Contractor shall size each "blast" to minimize nuisance and reduce the possibility of damage to local structures.

(i) DISPOSAL OF EXCESS EXCAVATED MATERIAL. The Contractor shall remove and dispose of all excess excavated or waste material at his own expense. Along pipeline alignments, excess excavated material suitable for fill, may be spread evenly over the limits of permanent easement and compacted to 90 percent of maximum dry density.

Excavated material shall not be deposited on private property unless written permission from the owner is secured by the Contractor thereof. Copies of said written permission, duly signed by the owner of the private property involved, shall be furnished to the District by the Contractor before such material is placed on private property.

02200.03 BACKFILL

(a) GENERAL. Backfill shall not be dropped directly upon any structure or pipe. Materials used for backfill shall be selected material, free from grass, roots, brush, or other vegetation, or boulders having maximum dimension larger than 6-inches.

Material coming within 6-inches of any structure of pipe shall be free of rocks or unbroken masses of earthy materials having maximum dimension larger than 3-inches. Backfill shall not be placed around or upon any structure until the concrete has attained sufficient strength to withstand the loads imposed. Backfill around water retaining structures shall not be placed until the structures have been tested, and the structures shall be full of water while backfill is being placed.

Whenever the excavated or pulverized asphalt material is unsuitable for backfill, the Contractor shall arrange for and furnish imported backfill material at his own expense.

NOT FOR BID

(b) PIPELINE TRENCH BACKFILL

(1) Pipeline trenches shall be back-filled to a level 6-inches above the tope of the pipe with selected sandy material obtained from the excavation; provided if, in the Engineer's opinion, said material is unsuitable for backfill purposes, imported material having a sand equivalent value of not less than 20 shall be used for this portion of the trench backfill. Imported sand backfill, when ordered by the Engineer, will be paid for under a separate unit price bid item if such bid item has been established; otherwise payment will be made in accordance with negotiated price.

Such material shall be compacted to 95 percent of maximum dry density where the trench is located under structures, and 90 percent of maximum dry density elsewhere. Compaction shall be obtained by mechanical means or, if reviewed by the Engineer, by using excess water and passing concrete vibrator between the pipe and side of trench.

(2) After the initial portion of backfill has been placed as specified above, and after excess water has completely drained from the trench, back-filling of the remainder of the trench may proceed. The remainder of the backfill shall be selected material obtain from the excavation and shall be placed in horizontal layers. Each layer shall be moistened, tamped, rolled or otherwise compacted to 95 percent of maximum dry density where the trench is located under structures, and 90 percent of maximum density elsewhere.

If the back-full material is sandy or granular in nature and the trench is not located under a structure, the layer construction may be eliminated, the compaction may be obtained by flooding and jetting, provided this latter method meets with the approval of the agency having jurisdiction over the highway or street. If flooding and jetting is permitted, the remaining backfill shall be placed in layers not exceeding 3 feet in thickness. Each layer shall be flooded, jetted and poled to secure complete saturation of the material before placing the next layer. Prior to flooding and jetting, the pipe shall be filled with water to prevent floating.

(3) For plastic sewer pipes (ABS or PVC type), trenches shall be back-filled with selected granular material (screened gravel) in the bedding area up to 6-inches above the top of pipe. The remaining backfill shall be as specified in previous paragraphs of this Section.

(c) BACKFILL AROUND AND BENEATH STRUCTURES, AND BENEATH PAVED AREAS. Except where otherwise specified for a particular structure or ordered by the Engineer, backfill placed around and beneath structures, and beneath paved areas, shall be placed in horizontal layers not to exceed 8-inches in thickness, as measured before compaction, where compaction is attained by means of steel drum vibratory rollers. Where the use of rollers is impractical, the layers shall not exceed 6-inches in thickness before compaction, and compaction shall be attained by means of hand-operated power-driven tampers. The backfill shall be brought up evenly with each layer moistened and compacted by mechanical means to 95 percent of maximum density beneath structures and paved areas.

NOT FOR BID

02200.04 COMPACTION TESTS

Where back-fill is required to be compacted to a specified density, test for compliance may be made by the Owner, at the expense of the Contractor, using the test procedure specified in "Methods of Test for Moisture-Density Relations of Soils, Using a 10-lb Rammer and 18-inch Drop" (ASTM D 1557).

Field density test shall be performed in accordance with the test procedure specified in "Method of Test for Density of Soil in Place by the Sand Cone Method" (ASTM D 1556). The Contractor's attention is directed to additional provisions related to testing contained in Section 3.09 of the General Conditions. Compaction test of the backfill will be required approximately every 500 feet (within streets), or more often if tests indicate the need, along the alignment of the road reconstruction. The Contractor at his expense shall excavate the holes for all the tests, backfill the holes and compact this backfill.

02200.05 SUBGRADE PREPARATION AND AGGREGATE BASE

Preparation of subgrade shall conform to Section 301-1.2 of the Standard Specifications. The top 4 inches of subgrade material shall be compacted to a relative compaction of 95 percent.

Water for use in subgrade preparation shall be potable. Water shall be applied to compact soil, subgrade, base, and surfacing material through the use of a watering truck which shall spray water uniformly. No chemical additives shall be used during the water application process.

Untreated base shall conform to Section 301-2 of the Standard Specifications and shall consist entirely of crushed aggregate base. Aggregate Base shall be clean and free from roots, vegetable matter and other deleterious substances, and be of such character that when wet it will compact to form a firm stable base. Material shall be in accordance with Section 200-2, and placing shall be in accordance with Section 301-2.3 of the Standard Specifications.

Payment – Payment for preparation of subgrade shall be made at the unit price bid per cubic yard for "**Place Aggregate Base**" and shall constitute full compensation for all equipment, materials, and labor necessary for preparation of subgrade, and no additional compensation will be allowed therefore.

NOT FOR BID

END OF SECTION

DIVISION 02500 - ASPHALT PAVING

02500.01 GENERAL

This Section covers the furnishing and placement of new asphalt concrete and of asphalt concrete required for the repair and replacement of pavements along streets, private driveways, and parking areas damaged by Contractor's operations. Where re-pavement is covered under the County, City or State Permits, the more stringent requirements shall govern. Minimum thickness of asphalt re-pavement shall be three inches along public streets and parking areas and 2-1/2 inches for private driveways, except for overlay at street inlets, feather overlay at all driveways and side road parking areas, the thickness as shown on plan and details.

Paving materials and methods of construction shall be in accordance with referenced sections of the Standard Specifications, California Department of Transportation. Thickness and extent of base courses, paving courses and other construction details shall be as shown. All provisions contained in the referenced Standard Specifications involving "measurement" and "payment" (Section 39-8 of the Standard Specs) are not applicable to work performed under this Contract.

02500.02 SUBGRADE PREPARATION

The subgrade on dirt roads only shall be scarified, mixed, compacted to a total depth of 6-inches and brought to the proper finish elevation. The subgrade shall be sprinkled with water and rolled with a steel roller until the subgrade is unyielding and a compaction of 95% of maximum density is achieved.

02500.03 WEED CONTROL (REQUIRED FOR DIRT ROADS ONLY)

One day before the application or placement of bituminous material on the base, the surface shall be sterilized with herbicide. Apply chemical as indicated by a certified advisor and per dosage indicated by manufacturer. Apply to the surface dry or as a solution.

Herbicide shall be a dry, free-flowing, dust-free chemical compound which is nonflammable, nonpoisonous and non-corrosive. The chemical shall be chlorate-borate compound, and shall be suitable for application in powder form or in a solution as EPA approved and per Certified Advisor recommendation provided by Contractor. Application rate will be determined by licensed applicator per Certified Advisor recommendations.

02500.04 ASPHALT CONCRETE

Asphalt concrete shall conform to the provisions in Section 39 of the referenced Standard Specifications. Aggregates shall be Type A and shall conform to the grading specified for 1/2" maximum - medium grading.

Paving asphalt shall be a steam-refined asphalt with a viscosity grade of PG 64-16.

NOT FOR BID

02500.05 MIXING AND TRANSPORTING

The asphaltic concrete shall be mixed at a central plant in accordance with Section 39 of the referenced Standard Specifications. Transportation of the asphaltic concrete from mixing plant to site shall be in trucks having tight, clean, smooth beds coated with the least quantity of concentrated solution of hydrated lime and water to prevent adhesive of mixture to trunk bodies. Each load of mixture shall be covered with canvas, or other suitable material, of ample size to protect mixture from weather and to prevent loss of heat. Deliveries shall be scheduled so that spreading and rolling of all mixture prepared for one day's run can be completed during daylight. Mixture shall be delivered in such a manner that temperature at the time of dumping into the spreader will be not less than below specified. Loads that have crusts of cold, unworkable material or have become wet by rain will be rejected. Hauling over freshly placed material will not be permitted.

02500.06 PLACING

(a) PREPARATION. Prior to placing the surface course, the underlying course shall be cleared of all foreign or objectionable matter with power blowers, power brooms or hand brooms.

(b) CONTRACT SURFACES. Contract surfaces of previously constructed pavement, curbs, manholes and similar, structures shall be sprayed with a thin coat of bituminous material.

(c) SPREADING. Spreading shall conform to requirement of Section 39 of the referenced Standard Specifications. The material shall be placed at a minimum temperature of 275 degrees F. and shall be compacted by rolling. **No asphaltic concrete shall be spread when the atmospheric temperature is below 50 degrees F. or during unsuitable weather.** The asphaltic concrete shall be evenly distributed and spread upon the subgrade or base to such a depth that after being thoroughly rolled it will be of the specified thickness and true to the prescribed cross-section and grade of the course being constructed. Spreading, once commenced, must be continued without interruption, and the equipment provided for that purpose must be sufficient to ensure such result. No greater amount of the mixture shall be delivered in any one day than can be properly distributed and rolled during that day.

Spreading machine shall be a self-propelled either track or wheeled type conveyed machine and shall have properly operated screed with automatic and manual controls to control mat thickness. Rate of spread will be made to sufficiently place the material at the proper un-compacted thickness to ensure that the specified compacted thickness is accomplished. Mat thickness may be placed in one single lift per pass provided that the placed, completed and compacted mat equals the specified thickness.

As soon as the layer of asphaltic concrete has attained a consistency that will permit, it shall be thoroughly compacted by rolling in accordance with Section 39 of the referenced Standard Specifications. Rolling surfaces shall be treated with water or oil to prevent the adherence of the asphaltic concrete, but the quantity used must not be such as to be detrimental to the surface being rolled.

02500.07 JOINTS

GENERAL. Joints between old and new pavements or between successive day's work, or joints that have become cold because of delay, shall be made carefully to ensure continuous bond between old and new sections of course. All joints shall have the same texture, density, and smoothness as other sections of course.

NOT FOR BID

(a) Contact surfaces of previously constructed pavements that have become coated with dust, sand, or other objectionable material shall be cleaned by brushing or cut back with approved power saw as directed. The surface against which new material is placed shall be sprayed with a thin, uniform coat of bituminous material. Material shall be applied far enough in advance of placement of fresh mixture to ensure adequate curing. Care shall be taken to prevent damage or contamination of sprayed surface.

(b) TRANSVERSE JOINTS. The roller shall pass over the unprotected end of freshly placed mixture only when placing of course is discontinued or when delivery of mixture is interrupted to the extent that unrolled material may become cold. In all cases, edge of previously placed course shall be cut back to expose an even, vertical surface the full thickness of the course. In continuing placement of strip, the mechanical spreader shall be positioned on transverse joint so that sufficient hot mixture will spread to obtain joint after rolling to conform to required density and smoothness specified herein. When required, the fresh mixture shall be raked against joints, thoroughly tamped with hot tamper, smoothed with hot irons, and rolled.

(c) LONGITUDINAL JOINTS. Edges of previously placed strip that have cooled or are irregular, honeycombed, poorly compacted, damaged, or otherwise defective, and unsatisfactory sections of the joint shall be cut back to expose clean, sound surface for full thickness of the course as directed.

When required, fresh mixture shall be raked against the joint, thoroughly tamped with hot tampers, smoothed with hot irons, and rolled.

02500.8 EDGES

Edges of pavement adjacent to shoulders shall be trimmed neatly to line. After final rolling has been completed and pavement is sufficiently hardened, an earth berm of selected material, not less than one foot wide, shall be placed against and to the full height of the pavement as soon as possible.

02500.9 CORRECTING DEFICIENT AREAS

Mixtures that become contaminated or that are defective shall be removed. Skin patching of an area that has been rolled will not be permitted. Holes that are full thickness of course shall be cut so that sides are perpendicular and parallel to the direction of traffic and edges are vertical. Edges shall be sprayed with bituminous material. Fresh paving mixture shall be placed in holes in sufficient quantity so that finished surface will conform to density specified herein.

02500.10 PROTECTION OF PAVEMENT

After final rolling of the pavement, vehicular traffic may not be permitted until the pavement has sufficiently cooled and hardened or for at least four hours.

02500.11 SURFACE REQUIREMENTS

Surface course, upon completion of final rolling, shall be smooth and true to grade and cross section. When a ten-foot straightedge is laid on the surface parallel with the centerline, the surface shall not vary more than 1/8 inch from straightedge. When the ten-foot straightedge is laid on surface transverse to centerline between crown and edge of pavement, surface shall not vary more than ¼" from straightedge. Low or defective areas shall be immediately corrected by cutting out faulty areas and replacing with fresh, hot mixture and compacting area to conform to remainder of pavement.

END OF SECTION

NOT FOR BID

02610 ASPHALT CONCRETE

Asphalt concrete shall be Type A and shall conform to the provisions in Section 39, "Asphalt Concrete," of the standard Specifications and these special provisions.

The last sentence of the first paragraph in Section 39-2.01, "Asphalts," of the Standard Specifications and the fifth, sixth, seventh and eighth paragraphs of Section 39-3.03, "Proportioning," of the Standard Specifications shall not apply.

The asphalt binder grade shall be PG 64-16. The amount of asphalt binder to be mixed with the aggregate for Type A ½-inch maximum asphalt concrete will be determined by the Contractor and submitted to the Engineer for approval in accordance with California Test 367 using the samples of aggregates furnished by the Contractor in conformance with Section 39-3.03, "Proportioning," of the Standard Specifications.

The aggregate for asphalt concrete (Type A) shall conform to the maximum, medium grading specified in Section 39-2.02, "Aggregate," of the Standard Specifications.

Additional asphalt concrete surfacing material shall be placed along the edge of the surfacing at road connections and private drives, hand raked, if necessary, and compacted to form smooth tapered conforms. Full compensation for furnishing all labor and tools and doing all the work necessary to hand rake said conforms shall be considered as included in the contract prices paid per square foot for the various contract items of asphalt concrete surfacing involved and no additional compensation will be allowed therefore.

Immediately in advance of applying paint binder, the roadway shall be free of moisture, loose or extraneous material and the cost of said work shall be considered as included in the contract price per square foot for the asphalt concrete involved and no additional compensation will be allowed therefore.

A prime coat is not required.

The price paid for asphalt concrete will include all costs for tack coat(s), applied to all edges and between layers of asphalt concrete and/or concrete paving or overlay.

END OF SECTION

NOT FOR BID