SECTION 02743 – ASPHALT CONCRETE PAVEMENT

PART 1 – GENERAL

1.1 WORK OF THIS SECTION

A. This section includes materials, testing, and installation of aggregate base course, prime coat, tack coat, asphalt concrete pavement, seal coat, and temporary paving as shown on the Project Drawings. Asphalt concrete shall conform to all requirements of the latest revision of the Standard Specifications for Public Works Construction (SSPWC), Parts 2 and 3 only, unless specifically referenced in the Contract Documents, and as specified herein.

1.2 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01300 – Record Drawings and Submittals

B. Section 02223 – Trenching, Backfilling and Compacting

1.3 SUBMITTALS

A. CONTRACTORs shall furnish submittals in accordance with the requirements of the standard specifications.

B. Submit a report per the standard specifications from a certified testing laboratory verifying that aggregate material is asbestos-free and conforms to the specified gradations or characteristics.

1.4 PAYMENT

A. NOT USED

1.5 TESTING FOR COMPACTION

A. The CONTRACTOR will be responsible for all costs associated with compaction testing of asphalt concrete pavement and shall provide test results to the AGENCY as described herein and in the standard specifications.

B. Determine the density of existing soil in place by the Sand Cone Method, ASTM D1556.

C. Determine laboratory moisture-density relations of soils by ASTM D1557.

D. Determine relative density of cohesionless soils by ASTM D4253 and D4254.

E. Sample backfill materials by ASTM D75.

F. “Relative compaction” is the ratio, expressed as a percentage of the in-place dry density to the laboratory maximum dry density.

G. Compaction shall be deemed to comply with the specifications when no more than one test of any three consecutive tests falls below the specified relative compaction. The one test shall be no more than three percentage points below the specified compaction. The CONTRACTOR shall pay the costs of any testing and retesting of work not conforming to the Specifications.

PART 2 – MATERIALS

2.1 AGGREGATE BASE COURSE

A. Aggregate base shall be in accordance with SSPWC Section 200-2.2 and be asbestos free.

2.2 TACK COAT

A. If paving over existing pavement, a tack coat shall be applied. Tack coat shall be SS-1H emulsified asphalt and shall conform to SSPWC Section 203-3.

2.3 ASPHALT CONCRETE PAVEMENT

A. Asphalt concrete paving shall be Type III-C2-PG 64-10 conforming to SSPWC Section 203.

2.4 FOG SEAL COAT

A. Seal coat shall be SS-1h asphalt emulsion conforming to SSPWC Section 203-3.

PART 3 – EXECUTION

3.1 SUBGRADE PREPARATION

A. Scarify 6 inches below new pavement section, bring to optimum moisture content, and compacted to a relative dry density of 95%.

3.2 AGGREGATE BASE COURSE

A. Base material shall be furnished, placed and compacted for asphalt concrete pavements as shown on Drawings and specified herein.

B. The spreading and compacting shall conform to SSPWC Section 301-2.2 and 301-2.3.

3.3 GRINDING

A. This work shall consist of grinding as detailed in these Contract Documents and per the City of Oceanside Engineers Design and Processing Manual (Oceanside Engineers Manual).

B. The work shall conform to SSPWC Section 302-1 and these Contract Documents.

C. A cold-planing header cut operation shall be used. The temperature at which the work is performed, the nature and condition of equipment, and the manner of performing the work shall be such that the pavement is not torn, gouged, shoved, broken or otherwise damaged by the planning operation.

D. Residue from the grinding operations shall be picked up by means of a vacuum attachment to the grinding machine and shall not be allowed to blow across the pavement nor be left on the surface of the pavement.

E. The CONTRACTOR shall dispose of asphalt grindings at a legal dumpsite and no additional payment will be made for this item.

F. All transition grinds at joints, (cold milling at right angles to the roadway) shall be a maximum of 1" (one inch) deep. The Contractor shall avoid damaging the gutter lip during their grinding operations; any concrete that has been broken, scarred, or damaged incidentally shall be replaced to the nearest joint or as directed by the AGENCY.

G. All curb and gutter grinds shall be 5' in width with a depth of 1-1/2" at the curb and 5'-0" away. Beginning and ending transition grinds (a.k.a. crosscutting at joints) shall be minimum 20' in length by the width of the roadway.

H. Grinding operations shall be incorporated into the construction schedule, so that the paving operations follows no later the 72 hours after the grinding and header cutting is completed on each individual street.

I. Hot Mix shall be placed at the lip of the grind at all driveway, ADA ramps, and transition grinds, so as to provide a natural and smooth temporary transition. The hot mix shall be removed on the day of the overlay. The use of cold mix will not be allowed.

J. Payment for grinding asphalt pavement shall be considered to be included in the contract unit or lump sum price paid for the various items of work wherein grinding is required and no additional allowance will be made therefore.

3.4 TACK COAT

A. Over existing pavement, a tack coat shall be SS-1h emulsified asphalt and shall be applied in accordance with SSPWC Section 302-5.4.

3.5 ASPHALT CONCRETE PAVEMENT

A. Materials and workmanship for asphalt concrete shall conform to the applicable provisions of SSPWC Section 203-6 and the following provisions.

1. Asphalt concrete pavement shall be spread in equal courses by means of a Barber-Greene paving machine, or approved equal. It shall be spread to a depth to achieve a compacted thickness of at least 1-1/2" thicker than the

original pavement, conforming to the Oceanside Engineers Manual. The completed surface shall be thoroughly compacted, smooth and true to grade and cross-section, and free from ruts, humps, depressions and irregularities.

2. When a straight edge is laid on the finished surface and parallel to the centerline, the surface shall not vary more than 1/8-inch in 10 feet.

3.6 FOG SEAL COAT

A. A seal coat of mixing type emulsion liquid asphalt meeting the requirements of SSPWC Section 203-3 shall be applied to asphalt concrete pavement. The emulsion shall be SS-1H and shall be applied at the rate of 0.1-gallon per square yard. CONTRACTOR shall spread sand and open to traffic for a minimum of 24 hours. CONTRACTOR shall then use a self-propelled sweeper to completely remove the sand under traffic control. Once the sweeping is complete and the sand is completely removed, allow the area to be opened to traffic.

3.7 ADJUST VALVE BOX RINGS, MANHOLES, AND MANHOLE COVERS

A. The CONTRACTOR shall adjust all valve box rings and manhole covers to grade within 48 hours after final paving of each street in which the pipeline is installed. The CONTRACTOR shall adjust all manholes, including adding concrete grade rings if necessary, to grade within 48 hours after final paving of each street in which the pipeline is installed. Provide access to all active utility valves and manholes at all times.

****END OF SECTION****