NOTE TO CONSULTANTS: This specification section shall be used for asphalt paving of basketball courts only. Edit with Track Changes turned on, any text in this section that appears in bold and italics then turn off the bold and italics for the final approved version. (Remove this Note)

PART 1 - GENERAL

1.01 Description: Furnish all material, labor, services and related items required to complete work indicated on drawings and/or specifications. The items of work to be performed shall include but may not be limited to; asphalt patching, installation of tack coat and fabric, and the import, placement, and compaction of Hot Mix Asphalt Paving for Basketball Courts.

1.02 Related Sections:

Section 01 56 39 - Temporary Tree & Plant Protection
Section 01 57 13 - Temporary Erosion & Sediment Control
Section 02 41 13 - Selective Site Demolition
Section 31 00 00 - Earthwork
Section 32 11 23 - Mineral Aggregates
Section 32 23 13.13 -Sub-grade Preparation for Asphalt Paving
Section 32 41 00 - Site Furnishings
Section 32 90 00 - Site Restoration

1.03 References: This section references the latest revisions of the following documents:

A. AASHTO M17 - Mineral Filler for Bituminous Paving Mixtures

B. The City of Seattle Standard Specifications for Road, Bridge and Municipal Construction (Most Recent Edition)

C. These references are a part of this section as specified and modified. In case of conflicts between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

1.04 Quality Assurance: The Contractor must have five (5) years experience in work of this nature and have the equipment and personnel required for the work specified. The Contractor must acquaint themselves with all work related to site improvements and other work. Payment for testing under this section shall be as follows:

A. Payment for testing under this section shall be as follows:

1. The first run of any test of a given sample of workmanship will be paid for by the Owner. Where possible, the Engineer will perform the initial test. In the event that the Engineer's capabilities are insufficient to perform the test in a timely manner, the test will be performed by the Contractor at a reasonable cost to the Owner.

2. In the event the sample of workmanship is found to be deficient in some way as a result of the initial test, the contractor shall remove from the project site(s) that work or material, and provide work or material as specified and with satisfactory test results at no additional cost to the Owner.

B. Test Reports shall be done under the supervision of the Contractor and in accordance with the Contract. Tests must be performed by a certified testing agency or licensed laboratory. The Engineer may require execution of tests described below, at the Contractors expense. Two copies of the results of each test shall be submitted to the Engineer for approval prior to continuation of the work to be tested, unless otherwise directed. Testing shall be performed according to the City of Seattle Standard Specifications (most recent edition).

1. ASTM C131 Test Method for Resistance to Degradation of Small Size Course Aggregate.
2. ASTM D1557 Test Method for Moisture Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb (4.54 kg) Rammer and 18-in (457 mm) Drop.
3. WSDOT Test Method of test for Determination of Method 705 Degradation Value.
4. WSDOT Test Maximum Specific Gravity of Bituminous Paving Mixtures Method 113.
5. Other tests as may be referenced elsewhere in this Section.

1.05 Submittals:

A. The Contractor shall submit to the Engineer written materials containing the following information:

1. Procedures to be used in construction of Basketball Court(s) with regard to the division of labor and responsibility of the Contractor and all sub-contractors involved.
2. Materials to be used and the proposed method of application and procedures to be followed.

B. Fine Aggregate for Class G Hot Mix Asphalt: The Contractor shall submit to the Engineer, for approval prior to delivery to the project site(s), a single 1/2 cubic foot sample in a secure container. Affix to the container the supplier name, address, and telephone number, batch number (if applicable), date, and sieve analysis.

PART 2 - PRODUCTS

2.01 Hot Mix Asphalt Wearing Course:

A. General: Class G HMA, a "3 bin" school mix (hot plant mix) having a maximum aggregate size of three - eighths inch (3/8") in accordance with the specifications of the Asphaltic Institute.

B. Aggregate: Mineral aggregate shall meet the requirements of the City of Seattle Standard Specifications (most recent edition), Section 9-03.8, for Class "G" Aggregates for Hot Mix Asphalt. Meet the following requirements for particle gradation:

Sieve Size	% Passing
1/2" Square	100
3/8" Square	97 - 100
1/4" Square	60 - 88
U.S. #10	32-53
U.S. #40	11 - 24
U.S. #80	6 - 15
U.S. #200	3 - 7

C. Bituminous Materials:

1. Asphalt furnished under these specifications shall not have been distilled at a temperature high enough to injure by burning or to produce flecks of carbonaceous matter, and upon arrival at the work, shall show no signs of separation into lighter and heavier components.
2. Asphalt shall be Medium Curing Liquid Asphalt, meeting or exceeding the characteristics defined in the Seattle Standard Specification (most recent edition) Section 9-02.1(2), and the following additional requirements:

Characteristic	Value Range
Mineral Filler, %	3.0 - 7.0
Asphalt, % of total mixture	4.0 - 7.5
Sand - Silt Ratio	5.5 - 10.5

PART 3 - EXECUTION

3.01 Barriers: The Contractor shall erect and maintain barricades, canopies, guards, and warning signs to the extent required by law and as is prudent for the protection of the public and protection of the work.

3.02 Tack Coat:

A. Asphalt tack coat shall meet the requirements of the City of Seattle Standard Specification (most recent edition). Tack Coat, generally at a rate of 0.02 - 0.08 gallons per square yard.

B. Where the new asphalt concrete abuts a curb or gutter, cold pavement joint, trimmed meet line, or any metal surface, a thin tack coat of asphalt shall be applied on the vertical face of the abutting surface by hand painting prior to paving. The

application on the contact surfaces shall be thin and uniform in order to avoid an accumulation of excess asphalt in puddles. The Contractor shall not apply the tack coat on vertical contact surfaces above the finished height of the asphalt concrete being placed.

3.03 Hot Mix Asphalt:

A. Placement: A course of asphalt shall be installed to the lines and grades as indicated on the drawings. The hot plant mix shall have an installation temperature of 275-300 degrees. Compaction thickness shall be as shown on Drawings but in no case shall the compacted thickness be less than two inches (2"). Compaction shall be by rolling with a powered steel wheel tandem roller weighing not less than three (3), and not more than five (5) tons; the finish roller weighing not less than one (1) ton. The hot plant mix shall be spread by methods and in a manner to produce a uniform density and thickness to meet a tolerance of one-fourth inch (1/4") in ten feet (10') measured in any direction.

B. Curing and Cleaning: New asphalt pavement must be completely cured (minimum of seven days of warm, dry weather, longer if cold or damp), prior to application of any materials. Pavement needs to be clean and free of all foreign matter. A high-pressure washer, air broom or hand sweeper shall be used; removal of grease and oil requires the use of a strong detergent. After using detergents the surface must be thoroughly flushed with water.

3.04 Water Testing:

Check the finished surface of the asphalt for puddling by flooding the entire paved area with water. Any puddle holding water deeper than a five cent piece should be outlined with chalk and repaired.

END OF SECTION