

SPECIFICATIONS FOR ASPHALT PAVING.

The Asphalt Association, 25 West 43rd Street, New York, has ready for circulation in printed form the following typical specifications prepared by its Technical Committee, which is composed of highway engineers and specialists. In the preparation of these specifications special attention has been paid to form and arrangement with the idea of making them definite, concise and free from ambiguities. The printed specifications are on single fold sheets of the size adopted by the U.S. Bureau of Public Roads, most of the State Highways Commissions, and many American and Canadian municipalities.

Asphalt Macadam Surface Course.

Asphaltic Concrete Surface Course (Coarse Graded Aggregate Type).

Asphaltic Concrete Surface Course (Fine Graded Aggregate Type).

Sheet Asphalt underB and Surface Courses.

Asphaltic Base (Asphalt Macadam Type).

A limited number of the following specifications in mimeographed form may also be obtained upon request:

Asphaltic Concrete Binder and Surface Courses.

Gravel Base.

Macadam Base.

Reconstruction of Old Macadam to Serve as Base Course.

Telford Base.

Portland Cement Concrete Base.

Truing Up Old Pavements to Serve as Base Course.

Preparation of Sub-grade.

Sub-Base.

Shoulders, Headers, Curbs and Gutters.

Specifications for Asphaltic Base (Asphaltic Concrete Type) will be available for distribution in the near future.

A few of the fundamental features of the specifications are as follows:

Asphalt Macadam Surface Course.—A minimum thickness of $2\frac{1}{2}$ inches utilizing a coarse aggregate of $1\frac{1}{2}$ to $2\frac{1}{2}$ inch crushed stone and asphalt cement of from 80 to 150 penetration are recommended. The limits of penetration of the asphalt cement are to be specified by the engineer within a ten point range if below 90 and within a 30 point range if over 90 penetration.

Asphaltic Concrete Surface Course (Coarse Graded Aggregate Type).—A finished thickness of 2 inches of asphaltic concrete composed of coarse aggregate 95 per cent of which will pass a $1\frac{1}{4}$ inch screen, fine aggregate, 4 to 6 per cent of filler and 5 to 8 per cent of asphalt of from 50 to 70 penetration (10 point range fixed by engineer) are the outstanding features.

Asphaltic Concrete Surface Course (Fine Graded Aggregate).—A finished thickness of two inches, with coarse aggregate 95 per cent of which passes a $\frac{1}{2}$ inch screen, sand, 7 to 11 per cent of filler, and 7.5 to 9.5 per cent of asphalt with a penetration of 50 to 70 (10 point range fixed by engineer) are recommended.

Sheet Asphalt Binder and Surface Course.—Binder and surface courses each having a thickness of $1\frac{1}{2}$ inches, binder course to have 60 to 80 per cent coarse aggregate, sand, and 4 to 6 per cent of bitumen, the asphalt cement for both courses to have a penetration of from 30 to 60 with a ten point range fixed by engineer. The surface course mixture is as follows:

Passing 10 mesh, retained on 40 mesh—10 to 40 per cent

" 40 mesh, retained on 80 mesh—22 to 45 per cent

" 80 mesh, retained on 200 mesh—12 to 30 per cent

" 200 mesh 10 to 20 per cent

Bitumen 9.5 to 12 per cent

Asphalt Base (Asphalt Macadam Type).—To consist of two courses—the first to have a thickness of $3\frac{1}{2}$ inches and the second $2\frac{1}{2}$ inches, coarse aggregate for first course to consist of $2\frac{1}{2}$ to $3\frac{1}{2}$ inch stone and for the second course $1\frac{1}{4}$ to $2\frac{1}{2}$ inch stone, asphalt cement to have penetration of from 80 to 150 (fixed within a 10 point range if less than 90 and a 30 point range if over 90, by engineer), one application of asphalt at the rate of 1.25 to 1.5 gallons per square yard to be made upon each course, and the second course covered with a thin layer of $\frac{3}{4}$ to $1\frac{1}{4}$ inch stone.

Asphaltic Concrete Binder and Surface Courses.—This specification provides for a $1\frac{1}{2}$ inch course of fine graded aggregate asphaltic concrete wearing course as specified under A-3 laid over a $1\frac{1}{2}$ inch binder course as specified under A-4.

Gravel Base.—To consist of two courses each not less than 4 inches in thickness after compaction, 95 per cent of the gravel to pass $3\frac{1}{2}$ inch screen and 50 to 75 per cent to be retained upon a $\frac{1}{4}$ -inch screen.

Macadam Base.—To consist of two filled courses, each not less than 3 inches in thickness, 95 to 100 per cent of the crushed stone to pass a $3\frac{1}{2}$ inch and 0 to 15 per cent a $2\frac{1}{2}$ inch screen, 95 to 100 per cent of the screenings to pass a $\frac{3}{4}$ or $\frac{1}{2}$ inch screen and 40 to 80 per cent a $\frac{1}{4}$ inch screen.

Reconstruction of Old Macadam to Serve as Base Course.—Provides for reconstruction of old macadam in order to secure a minimum thickness of six inches after compaction.

Telford Base.—Provides for hand laid 8-inch Telford Base.

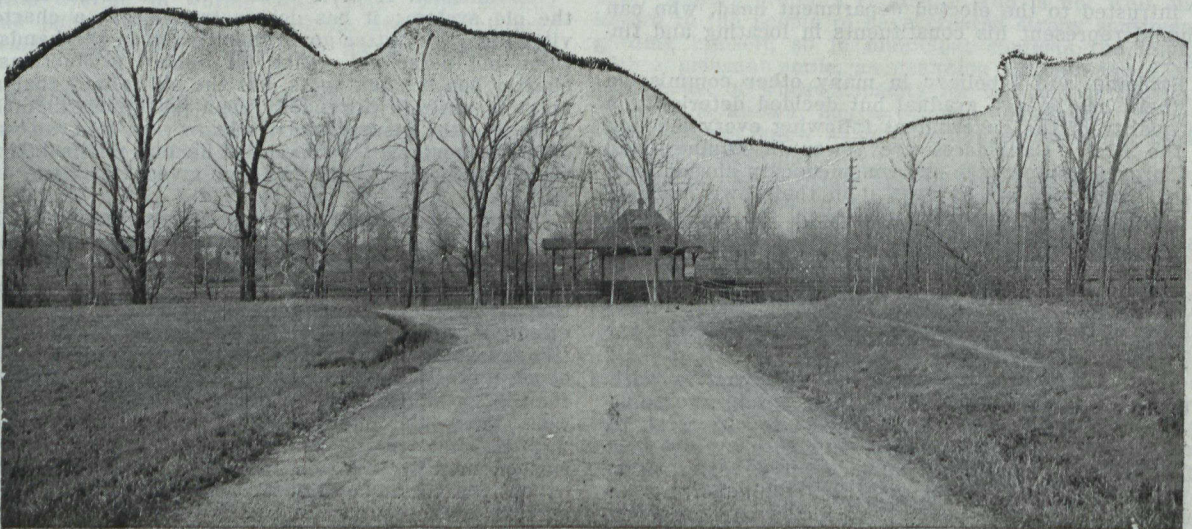
Portland Cement Concrete Base.—A mixture in the proportions of 1-3-6 with a thickness of six inches is specified.

Truing Up Old Pavements to Serve as Base Course.—Provides for truing up old pavements by the use of an asphaltic concrete mixture in preparation for the application of an asphaltic wearing course.

Preparation of Sub-Grade (No Explanation Required).

Sub-Base.—Provides for a sub-base of field stone filled with smaller fragments and compacted.

Shoulders, Headers, Curbs and Gutters.—Provides for gravel, water-bound and asphalt macadam shoulders, and portland cement concrete headers, curbs and gutters.



A Tarvia Road.