AN ORDINANCE TO ESTABLISH REQUIREMENTS FOR CONSTRUCTION OF NEW ROADS AND STREETS IN THE CITY OF BELLE MEADE; AND PROVIDING FOR THE APPOINTMENT OF A FIELD REPRESENTATIVE TO INSPECT AND DETERMINE COMPLIANCE; AND REQUIRING REPORT OF SUCH COMPLIANCE BEFORE APPROVAL SHALL BE GRANTED, AND PROVIDING THAT APPROVAL MAY BE BY RESOLUTION OF BOARD OF COMMISSIONERS.

BE IT ORDAINED BY THE CITY OF BELLE MEADE AS FOLLOWS:

SECTION 1. The following procedures, directions and requirements are established and shall be complied with in the case of every new road or street constructed for approval, acceptance and maintenance by the City of Belle Meade:

A. PREPARATION OF SUBGRADE

Before grading is started, the area within the limits of construction shall be cleared of all objectionable matter, such as trees, stumps, roots, weeds, heavy vegetation, etc. Topsoil shall be removed and stock piled for later use as a topping-out material for seeding and sodding. If rock is encountered, it shall be removed to a depth of at least 12 inches below the grade of the road, and suitable backfill material will be used to build the cut section up to proposed grade. Fills shall be compacted to 95 per cent of the standard optimum Proctor density. (Soil testing shall be accomplished by an approved testing laboratory). To attain this compaction, it will be necessary to adhere to the following procedures: Fill material shall be evenly and uniformly spread in layers not to exceed 8 inches in thickness over the entire width and thickness of the embankment section. Each layer shall be thoroughly rolled with an approved sheeps foot or pneumatictired roller. If, in the opinion of the field representative of the City of Belle Meade, the soil is too dry, water will be added by a pressure distributor or other approved method. Soils which are too wet will be allowed to dry before compaction is attempted. After grading is completed and approved by the City of Belle Meade and before any base is applied, all of the underground work - - water mains, gas mains, telephone cable, and service connections from any of the above shall be installed completely throughout the length and width of the road. Where the subgrade is cut for installation of underground utilities, the backfill shall be thoroughly compacted in layers not to exceed 8 inches in thickness by hand or by pneumatic tamping equipment. Backfills shall be compacted to a density not less than that of the original compacted fill. The finished subgrade shall provide for superelevation and crown of the roadway.

B. BASE

After the subgrade has been inspected and approved by a representative of the City of Belle Meade, a base shall be constructed 8 inches thick and twenty feet wide. The base material shall be a crushed stone of quality and gradation specified by Item 33C-l or Item 33P-l, standard specifications, Tennessee State Highway Department. The stone shall be deposited and uniformly spread in layers not to exceed 4 inches in compacted thickness. Each layer of the stone shall be sprinkled with water in sufficient quantity to moisten all particles but not with an amount that would cause segregation of sizes nor softening of the subgrade. Immediately following the application of water, the stone shall be bladed and turned with a motor patrol grader to obtain a uniform mixture, after which it shall be re-spread to the required lines, grades and cross-section. Watering, blading and turning will not generally be required when Item 33P-l is used. The base course material shall be placed on the subgrade in two or more layers and each course shall be shaped and immediately compacted before the succeeding course is placed.

The compacted dry weight per cubic foot of material in each layer shall not be less than 98% of that determined as an average of maximum compaction for the materials in use. The determination of the average maximum compacted dry weight pounds per cubic foot shall be calculated by multiplying the Specific Gravity of the mineral aggregate by 53.

C. PRIME COAT

The base, prepared as outlined above, shall be sprinkled lightly with water to settle any loose dust. A bituminous prime coat shall then be uniformly applied over the entire width of the base (excluding shoulders) by the use of an approved pressure distributor at a pressure between 25 and 75 pounds per square inch. The distributor shall be equipped with spray bars that will cover as much as 18 feet of width in one pass of the machine. It shall also be supplied with at least one accurate asphalt thermometer which shall be maintained in good condition at all times. The prime coat shall be applied at the rate of three-tenths (0.3) gallons per square yard, using one of the following materials:

MATERIAL	TENN. STATE HWY.DEPT. SPECIFICATIONS_	TEMPERATURE OF MATERIAL AT APPLICATION
Asphalt Emulsion A E-1		50 deg. F - 140 deg. F
Cut back Asphalt	213.02	80 deg. F - 150 deg. F

The bituminous material shall conform to the quality specifications indicated above and shall be applied at a temperature within the range specified. Unless otherwise directed, the prime coat shall be applied only when the air temperature in the shade and away from artificial heat is more than 60 deg. F. and only between April 1st and November 1st. Immediately after application of the prime coat, the primed area shall be uniformly covered with crushed stone chips (Tenn. Hwy. Dept. Size No. 15 or 16) at the rate of ten (10) pounds per square yard. Twenty four hours shall elapse after the application of the prime before subsequent asphaltic treatments are applied. All traffic shall be excluded from the road until it has dried sufficiently not to pick up under traffic.

D. ASPHALTIC CONCRETE BINDER COURSE

After the prime coat has properly cured, dust, clay, and other foreign or loose material shall be removed with hand brooms, shovels, etc., well beyond the construction limits onto the shoulders, but care shall be exercised not to loosen, tear or otherwise injure the primed surface. After the surface has been thus cleaned, and before subsequent paving operations are commenced, the surface shall be inspected by the City of Belle Meade or their representative. If, in the opinion of the Inspector the primed area is not sufficiently viscous to form a complete and thorough bond with the binder course, the surface shall be sprayed with a Tack Coat (RC-1 or RC-2) in an amount not less than 0.05 gallon nor more than 0.15 gallon per square yard. The Tack Coat shall be consistently uniform over the entire area treated, and shall be allowed to cure until it is thoroughly viscous. The City of Belle Meade or its representative will determine the completion of the curing period after which further construction shall proceed. Unless otherwise directed by the City of Belle Meade, the Asphaltic concrete Binder Course shall conform to the Tennessee State Highway Specifications, Section 43LC, as regards materials and composition of mixture; and to Section 92, Tennessee State Highway Specifications, as regards equipment used, preparation and transportation of mixture, and spreading and compacting procedures. However, the asphaltic concrete mixture shall be spread only when the prepared surface is intact, firm, property cured, dry and the tack coat is in satisfactory condition; only between March 1st and December 1st; and unless otherwise directed, only when the air temperature, in the shade and away from artificial heat, is above 40 degrees F. After the Asphaltic Concrete Binder Course has been completed, crushed stone (33C-1 or 33P-1) shall be uniformly applied to the shoulders in a quantity to provide an additional 2 inch compacted thickness. The stone shall be thoroughly rolled, and primed and chipped. The completed surface shall be true to the lines, grades, and cross-sections specified by the plans and by these regulations and shall provide a smooth uniform riding surface.

E. SHOULDERS

Shoulders shall be compacted to the thickness and width as shown on the Typical Section Plan.

Shoulders shall be compacted in accordance with the provisions for construction of the base and of the same quality and gradation of stone. The shoulders shall be finished, primed, and chipped after the Asphaltic Concrete Binder Course has been completed.

SECTION 2. The Mayor is authorized to appoint a field representative for the City to inspect and approve such procedures and construction work in progress, such field representative shall be an engineer licensed by the State Board for Licensing Engineers and Architects with experience in road and street construction, or shall have had not less than ten (10) years experience in the construction of roads and streets in Tennessee and the inspection of same, or shall be designated as qualified to perform and inspect work by the Commissioner of Highways of the State of Tennessee.

SECTION 3. No road, street or highway shall be approved for acceptance and maintenance by the City of Belle Meade until same shall have been approved by an inspector appointed in conformity with the provisions hereof. Upon notification of such approval, the Board of Commissioners may, by appropriate resolution adopted by majority vote, consummate approval and acceptance for maintenance by the City.

<u>SECTION 4.</u> All ordinances and resolutions and parts thereof in conflict herewith are hereby repealed.

VICE MAYOR

COMMISSIONER

Passed First Reading February 1, 1962.

Passed Second Reading February 8, 1962.

Passed Third Reading and Adopted April 6, 1962.