

SECTION 19 GENERAL IMPROVEMENT REQUIREMENTS AND SPECIFICATIONS

A. On-Tract Improvements

On-tract improvements, including grading street rights-of-way, street or shoulder paving, curb and gutters, street signs, street lighting, street trees, sidewalks, surface drainage structures and facilities, soil erosion and sediment control devices, potable water supply structures and facilities, sanitary sewerage facilities and, in the case of site plans, off-street parking and loading areas and improvements and screen or buffer planting, as specified in accordance with design criteria contained in this ordinance, shall be required, where applicable, in connection with all minor and major subdivisions and site plan developments, including permitted planned developments of any kind.

B. Off-Tract Improvements

Pursuant to N.J.S.A. 40:55D42, pro-rata contributions may be required for any off-tract improvements, including street or shoulder paving, curbs and gutters, street signs and traffic controls, street lighting, structures and facilities and sanitary sewerage structures and facilities, for which the need, or a portion of the need, is generated by a minor or major subdivision, or a site development, including permitted planned developments of any kind. The municipal engineer shall utilize construction specifications and design criteria for the purpose of assessing a fair share of the cost of any such improvement to a specific development. In the case of arterial roads, design standards and construction specifications shall be on a case-by-case basis. The reviewing board shall determine the reasonable percentage share of the benefit to be derived from any required off-tract improvement by the specific development on the basis of a cost benefit analysis conducted by the municipal engineer.

SECTION 19 GENERAL IMPROVEMENT REQUIREMENTS AND SPECIFICATIONS
(Cont'd)

C. Installation of Improvements

No final plat of a major subdivision or site plan shall be approved by the Planning Board until the satisfactory completion of all required improvements, as set forth in the Planning Board's resolution granting preliminary subdivision or site plan approval, shall have been certified to the Planning Board by the municipal engineer, unless the developer shall have filed with the municipality a performance guarantee in a sufficient amount and of a suitable form to cover the cost of all such improvements or the uncompleted portion thereof as approved by the municipal engineer and guaranteeing the installation of any such uncompleted improvements on or before a date to be specified by the Planning Board.

Such guarantee shall provide that all roadways shall have a base course installed no later than when certificates of occupancy have been issued for 10% of the proposed dwelling units and a final course installed no later than 90% of the units. No minor subdivision shall be approved by the reviewing board until the developer has filed a performance guarantee with the municipality in a sufficient amount to cover the cost of all required on-tract and off-tract improvements and guaranteeing the installation of such uncompleted improvements on or before a date to be specified by the Planning Board.

D. Concrete Structures

Concrete structures shall conform to the American Society for Testing Materials Cement Designations: C-150, Type 1 for standard Portland cement; C-150 Type 3 for high early strength Portland cement; and C-175, Type 1-A for air entraining Portland cement. Vinsol resin or Darex A.E.A. shall be used as the air entraining agent and both fine and course aggregate and shall conform to requirements therefore of the New Jersey Department of Transportation Standard Specifications, as amended, unless otherwise specified, having 4% to 7% entrained air.

SECTION 19 GENERAL IMPROVEMENT REQUIREMENTS AND SPECIFICATIONS
(Cont'd)

Concrete shall be Class A, B, C, or D, as prescribed, proportioned as follows:

<u>Class</u>	<u>Cement</u>	<u>Sand</u>	<u>Coarse Aggregate</u>	<u>Void Content</u>
A	1	1.50	3.0	1.35
B	1	1.75	3.5	1.55
C	1	2.00	4.0	1.80
D	1	2.25	4.5	2.00

Required reinforcing steel shall be Intermediate Grade deformed bars, conforming to American Society for Testing Materials, designation A 617-76 and A 615-76A, as amended.

Required joint filler shall be a cellular compression material conforming to the requirements therefore of the New Jersey Department of Transportation Standard Specifications, as amended.

In the construction of required concrete structures, the municipal engineer will determine the slump range within which the contractor must work. Transit mix concrete may be used if obtained from sources approved by the municipal engineer. On-site mixing and proportioning equipment will also be subject to the approval of the municipal engineer.

Forms shall conform to lines, dimensions and grades shown on plans and may only be omitted when soil conditions and workmanship permit accurate excavation to specifications. Forms shall be firmly braced, tight and capable of resisting movement, bulging or mortar leakage. Forms shall be smooth and clear and shall be completely removed.

Soil bases for concrete work shall be properly finished to prescribed lines, grades and dimensions and shall be approved by the municipal engineer or his representative before concrete is placed. All areas to receive water, except that soil surfaces and forms shall be uniformly damp when concrete is placed to as to avoid segregation.

SECTION 19 GENERAL IMPROVEMENT REQUIREMENTS AND SPECIFICATIONS
(Cont'd)

Concrete which has begun to set or has been contaminated with foreign materials or has too much water shall not be used. Pouring shall be done in a continuous process until an individual section is complete. All concrete shall be thoroughly compacted with vibratory or other suitable equipment. Finished concrete shall have a wood float finish, unless otherwise specified by the municipal engineer and shall be kept continuously moist for a period of 3 days. Curing shall be accomplished at the direction of the municipal engineer. Expansion joints shall be provided as prescribed and shall extend to the full thickness of the concrete. Concrete shall not be poured when the temperature is below 40° F or during periods of precipitation, unless precautions acceptable to the municipal engineer have been taken to prevent damage to the work. Precautions to avoid freezing of the concrete shall be in accordance with the current recommendations of the American Concrete Institute.