

TOWN OF WEST HARTFORD  
ENGINEERING DIVISION  
DEPARTMENT OF COMMUNITY DEVELOPMENT

**SECTION B-4**

**TECHNICAL SPECIFICATIONS**

**FOR STREET CONSTRUCTION**

## B-4 TECHNICAL SPECIFICATIONS FOR STREET CONSTRUCTION

GENERAL DESCRIPTION

Streets in the Town of West Hartford are classified under Urban Systems into five categories: 1) Primary Arterial, 2) Secondary Arterial, 3) Collector, 4) Downtown Grid, and 5) Residential.

1. Streets Classified #1 thru #4: Width and pavement cross-sections for these types of streets depend mainly on the volume of traffic and soil conditions. All specifications shall be determined by the Town Engineer.
2. Streets Classified #5: They are designated as “type C” streets and shall conform to the typical cross-sections included herein. The pavement of a “type C” street is thirty (30) feet wide and consists of 3” of bituminous concrete, installed in two courses on a 9” thick compacted processed stone or processed gravel base.

All materials and construction methods shall conform to the standard specification for “Roads, Bridges and Incidental Construction”, State of Connecticut, Department of Transportation.

## SPECIFICATIONS

A. CLEARING AND GRUBBING:

See Section 2.01, State Department of Transportation Specifications.

B. GRADING:

See Sections 2.02, 2.05, 2.06 of the State Department of Transportation Specifications.

Grading shall include all the necessary labor and material to stabilize and bring the ground to the proposed sub-grade level.

1. There shall be no excavation below sub-base level unless ordered by the Engineer.
2. When ledge rock is encountered, this material shall be excavated to a depth of not less than 12 inches below sub-base and replaced with gravel or other material approved by the Engineer.
3. Unstable material shall be removed and replaced with granular material to a depth approved by the Engineer.

4. Spring or seepage water encountered shall be reported to the Town Engineer. The contractor shall keep the excavation free from water at all times by pumping or by any other means that may be necessary. The Engineer shall determine the necessity of underdrains.
5. Fill shall not be started until the area has been inspected and approved by the Town Engineer.
6. Only material approved by the Town Engineer shall be used as fill.
7. Fill material shall be compacted in layers not more than 6 inches thick with a minimum 10-ton roller.
8. Compaction shall be such that no creeping or weaving appear ahead of the roller on the final rolling.
9. No stone over 5 inches in its greatest dimension shall be placed within 12 inches of the elevation of the sub-grade.
10. All streets shall be graded the entire width of the right-of-way with side slopes of 2 to 1 as indicated on the standard cross-sections accompanying these specifications. Any exception to this procedure shall be at the discretion of the Director of Public Works.

#### C. PREPARATION OF THE SUB-GRADE

(See Sections 2.07, 2.09, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15 of the State Department of Transportation Specifications.)

1. The rough sub-grade shall be cleaned of all loose or foreign material and reshaped if rutted. Approved material shall be added to meet the established grades and standard cross-sections. Shaping and compacting, as directed by the Town Engineer, shall be done with blade graders and a 3-wheel power roller weighing a minimum of 10 tons or an equivalent vibratory roller. The Town Engineer shall have the authority to direct the contractor to engage a certified laboratory for the purpose of determining compaction by suitable testing.
2. The finished surface shall be smooth and even and shall not vary more than 1/2-inch from the standard cross-section or established grade. Any deviations from this cross-section and grade shall be corrected by cutting or filling, followed by repeated rolling until a well compacted surface is obtained.

#### D. CONSTRUCTION OF THE BASE

(See Sections 3.02, 3.04 of the State Department of Transportation Specifications.)

1. The base shall consist of processed stone or processed gravel and shall conform to DOT Spec. 3.04 & Article M.05.01 (State D.O.T. Specifications noted above).
2. The base material shall be placed in layers not more than 6-inches thick. Each layer is to be spread with an approved spreader or stone box and rolled with a 3-wheel roller weighing a minimum of 10 tons or an equivalent vibratory roller.
3. Rolling shall proceed in a longitudinal direction beginning at the gutter line and proceeding toward the center. Sufficient overlap with the inside roller wheel shall be maintained to avoid any unrolled areas. Rolling shall be continued until the material is well keyed and does not creep ahead of the roller. In no case shall one roller complete more than 200 square yards per hour.
4. The base course shall not be constructed during freezing weather or on a wet or frozen sub-grade.

#### E. BITUMINOUS CONCRETE

(See Sections 4.02, 4.03, 4.04, 4.05, 4.07)

1. For “type C” streets this work shall generally consist of a Class 2 bituminous concrete wearing course 1 1/2-inches thick after compaction on a Class 1 binder course 1 1/2-inches thick after compaction.
2. The thicknesses and type of material to be used in unusual situations shall be determined by the Town Engineer.
3. Bituminous concrete material shall be compacted with a minimum 10-ton roller.

DESIGN STANDARDS

1. Grades for all new streets shall not be less than 1% or exceed 8% unless otherwise approved by the Town Engineer.
2. Minimum width of pavements shall be as shown on the typical cross-section included herein.
3. Sidewalks, curbs, driveway ramps, wheel chair ramps, concrete ramps and sewers shall conform to the appropriate specifications of the Town of West Hartford.
4. In case of ambiguity or conflict in these street specifications, the State Department of Transportation Specifications shall govern.