

# **SPECIFICATIONS FOR STREET CONSTRUCTION WITHIN THE TOWN OF PLAINVILLE**

BE IT ORDAINED by the Town Council of the Town of Plainville:

## **SECTION 1. SUBDIVISIONS.**

All subdivisions hereinafter developed within the Town of Plainville requiring construction of streets shall be subject to the following minimum specifications.

## **SECTION 2. PERFORMANCE BOND.**

A Performance Bond in the amount of 100% of the estimated construction cost shall be posted with the Town of Plainville before any construction activities may occur. The value of such bond shall be established by the Planning and Zoning Commission. This bond may be in the form of a certified check, passbook account, insurance surety or other means deemed appropriate by the Plainville Planning and Zoning Commission.

## **SECTION 3. RIGHT OF WAY.**

The right-of-way shall be a minimum of fifty (50) feet in residential zoned areas and a minimum of sixty (60) feet in commercial and industrial zoned areas.

## **SECTION 4. PAVED SECTION.**

The pavement shall be no less than thirty-two (32) feet clear between curbs and shall have a four and one-half (4 ½) inch crown on all fifty (50) foot rights-of-way. Wherever a sixty (60) foot right-of-way may be required, the pavement shall be not less than thirty-four (34) feet clear between curbs and shall have a five (5) inch crown.

The subbase shall be constructed of twelve (12) inches of bank run gravel topped with a base of four (4) inches of processed aggregate or a total of twelve (12) inches of processed aggregate. All subbase and base materials shall conform to the applicable specifications in the most current State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction.

The developer shall perform all necessary grading operations to bring the roadbed to finished subgrade elevations as shown on the approved plans & profile drawings. Where the initial

excavation uncovers spongy or unstable material, the developer shall remove such material within the roadbed area to such depths as directed by the Department of Technical Services and back fill with gravel or other suitable material before placing the subbase material. Grading shall include the placing of the bank run gravel and the processed aggregate to the depths noted above.

The subbase shall be compacted in material lifts not exceeding six (6) inches with a self-propelled roller weighing not less than ten (10) tons or equivalent vibratory unit exerting a downward force of not less than three hundred (300) pounds per lineal inch of contact surface. Compaction shall continue until the density of the compacted material achieves ninety-five (95) percent of the theoretical dry density. After compaction, any low or uneven portions of the roadbed shall be brought to grade to the satisfaction of the Department of Technical Services. Any other method of compaction must be approved by the Department of Technical Services.

Only after the roadbed base has been installed, inspected and approved by the Department of Technical Services, may the pavement surface be installed. The pavement surface shall consist of three (3) inches of bituminous concrete for residential roadways and four (4) inches for commercial and industrial roadways.

The bituminous concrete shall be manufactured in conformance with the most current State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction. The pavement shall be installed in two courses consisting of a two (2) inch binder and minimum one (1) inch finished course after compaction. All bituminous surfaces shall be thoroughly compacted to ninety five (95) percent of the maximum theoretical density. The developer shall be required to receive permission from the Department of Technical Services to install any bituminous concrete pavement during the period which extends from November 15th to April 15th.

#### **SECTION 5. CURB.**

Concrete curb shall be installed on all commercial and industrial roadways. The installation of concrete curb may be waived in lieu of bituminous concrete curbing by the Planning and Zoning Commission. Concrete curb shall be six (6) inches at the top, eight (8) inches along the bottom and twenty (20) inches in depth. The top of curb shall be five (5) inches above the finished pavement grade. The concrete mix shall be composed of a four thousand (4000) lb. mix with a

maximum slump of five (5) inches. Placement shall include mechanical vibration of the concrete. At least one (1) test cylinder per day shall be taken by the Department of Technical Services. If warranted the Department of Technical Services may request additional test cylinders. Any costs associated with the test cylinders and testing shall be borne by the developer and a copy of each test report shall be given to the Department of Technical Services for its records.

Bituminous concrete curbing shall be installed on residential roadways. Equipment specifically designed for the installation of six (6) inch bituminous concrete curbing shall be used. Hand formed curb will be permitted only upon written approval of the Department of Technical Services. The material and installation requirements shall conform to the guidelines outlined in the most current State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction.

The developer shall be required to receive permission from the Department of Technical Services to install any curbing during the period which extends from November 15th to April 15th.

#### **SECTION 6. DRAINAGE.**

The developer shall construct storm drainage systems where and as shown on the approved plan and profile drawings. All such construction shall be subject to the inspection and approval of the Department of Technical Services. The construction methods shall be in accordance with the most current methods of the State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction.

Pipe shall be of standard reinforced concrete pipe or polyethylene pipe of an approved type and gage. Concrete pipe shall be joined with full Portland cement mortar joints unless otherwise directed. Where excessive ground water is encountered or poor drainage is anticipated, the Department of Technical Services may require that suitable underdrains be installed prior to placement of the subbase course of pavement. The installation methods for polyethylene pipe shall be in conformance with the pipe manufacturer's recommendations.

Catchbasins and manholes shall be constructed of precast concrete components unless otherwise directed by the Department of Technical Services. All materials and installation methods shall conform to the requirements outlined in the most current State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental

Construction. Catch basins, manhole frames and covers shall be in conformance with the Department of Technical Services standard details.

Catchbasins shall be State of Connecticut Department of Transportation type "C". The catch basin shall be constructed with a two (2) foot sump below the invert of the lowest pipe.

Drainage pipe shall be not less than fifteen (15) inches in diameter. The developer shall provide calculations estimating the projected amount of runoff and size the drainage structures appropriately. The roadway drainage shall be based on a twenty-five (25) year storm event and detention/retention structures shall be designed for an one hundred (100) year storm event. The Department of Technical Services shall review and approve the drainage calculations.

Drainage easements and flowage rights shall be furnished by the developer to and in the name of the Town of Plainville where they are required to install or maintain drainage installations outside the limits of the street right of way. Such easements shall be a minimum of twenty (20) feet in width. The grant of easement shall be in a form approved by the Town of Plainville and filed in the land records of the Town Clerk's office.

Any proposed changes or revisions in the drainage system other than shown on the approved plans shall be submitted to and approved by the Department of Technical Services in advance of construction.

#### **SECTION 7. MERESTONES.**

Merestones shall be furnished and set by the developer on the street lines at all PC's and PT's and development boundaries so that at final grade they shall be level with the ground surface. Merestones shall be of reinforced concrete at least thirty-six (36) inches in length, four (4) inches at top, six (6) inches at base.

#### **SECTION 8. SANITARY SEWERS.**

All subdivisions shall be serviced by public sanitary sewers, unless the developer can demonstrate to the Plainville Water Pollution Control Authority the connection to such system is not feasible. All sanitary sewer construction activities shall be in accordance with all applicable Town ordinances and specifications. The subdivision developer shall prepare and submit all plans and profiles for approval of the Department of Environmental Services prior to submission to the Planning and Zoning Commission. The Department of Environmental Services may

request engineering reports, additional engineering plans and other relevant information pertaining to the sewer installation if deemed appropriate. The sanitary sewer installation shall be inspected and tested under the direction of the Department of Environmental Services. Any costs associated with inspections and testing shall be the responsibility of the developer. No lateral connections to the public sanitary sewer will be permitted until it is accepted by the Plainville Water Pollution Control Authority.

Sanitary sewers shall be installed where possible within the right of way. Otherwise, the developer shall grant the Town of Plainville all easements and rights necessary to install and maintain the sewer lines. Such easements shall be a minimum of twenty (20) feet in width. The grant of easement shall be in a form approved by the Town of Plainville and filed in the land records of the Town Clerk's office.

#### **SECTION 9. CAPPED SEWERS.**

A “capped” sewer shall be defined as a sanitary sewer which is installed for connection to the Plainville Sanitary Sewer System.

A subdivision developer shall prepare the plans and profiles of the design and all relevant information pertaining thereto concerning “capped” sewers. “Capped” sewers shall be installed to serve all lots and buildings within the subdivision. The design for “capped” sewers shall be as approved by the Department of Environmental Services. Review and inspection of the construction activities shall be as specified in Section 8 of this ordinance. If at the time of final approval of the subdivision, the Town of Plainville is unable to provide design criteria for connection of the “capped” sewer to the Plainville Sanitary Sewer System, the developer shall not be required to install “capped” sewers.

The installation of a “capped” sewer system shall be required in all areas which can not be immediately served by the public sanitary sewer system unless this requirement is waived by the Plainville Water Pollution Control Authority. The “capped” sewer shall consist of sewer lines and individual laterals and where possible the sewer line shall be installed beneath the proposed right of way. In locations where the sewer line can not be positioned in the right of way, the developer shall furnish the Town of Plainville all easements and rights to install and maintain the sewer line. The grant of easement or rights shall be in a form approved by the Town of Plainville. Laterals shall be extended from the public sewer line to the property boundary for each lot in the development.

## **SECTION 10. ENGINEERING AND INSPECTION.**

The developer shall furnish all lines, grades and construction stakes for all construction, setting of merestones, etc.

All construction and materials used in connection with these public improvement specifications shall be subject to the inspection and approval of the Town Council of the Town of Plainville or its authorized representatives. No materials or work shall be approved or accepted without such inspection and it shall be the responsibility of the developer to notify the Department of Technical Services or his agents at various stages during construction so that the necessary inspections may be made.

The developer shall provide connections to a public water supply and sanitary sewer system for each lot deriving its access from the proposed streets covered under these public improvement specifications, when such utilities are available or when their extension is deemed practical by the Town. The standards for water mains shall be those in effect by the Valley Water Systems or its successor, but in no case shall they be less than six (6) inch cement lined cast iron pipe. The Department of Technical Services and Fire Department will arrange for locations of fire hydrants as required.

All trenches within the roadway limits shall be backfilled with materials acceptable to the Department of Technical Services and in no case shall clay or other unsuitable material be used for backfill. All trench backfill shall be thoroughly compacted to the satisfaction of the Department of Technical Services before the roadway pavement is installed.

Where the land contours adjacent to a street right-of-way requires a cut or fill slope on the adjacent property, such slopes shall be constructed in accordance with specifications of the Department of Technical Services and the developer shall install such protective facilities as the Department of Technical Services shall require. In all cases where grading outside street limits are required, the developer shall furnish necessary easements and slope rights to and in the name of the Town of Plainville so that the Town may maintain them upon acceptance of the streets. Where such abutting property is owned by persons other than the developer, necessary easements and/or slope rights shall be acquired prior to construction. All documents shall be subject to approval of the Town of Plainville.

The streets, and particular lengths thereof, covered under these public improvement specifications will not be accepted by the Town of Plainville until the developer has constructed the streets and other public improvements as herein specified and has deposited with the Town of Plainville a one (1) year maintenance bond in an amount of ten (10) percent of the construction estimate as approved by the Planning and Zoning Commission.

#### **SECTION 11. SIDEWALKS.**

Concrete sidewalks shall be installed along the curbline of both sides of any roadway unless waived by the Planning and Zoning Commission. The concrete surface shall be installed over a compacted four (4) inch process trap rock base. The walks shall be four (4) inches thick, except at driveways where they shall be six (6) inches thick, reinforced with six by six (6 x 6) wire mesh extending two (2) feet beyond each edge of the driveway. Sidewalk slabs shall be five (5) feet long, four (4) feet wide with proper type expansion joints every twenty (20) feet and flush with the walk surface. Concrete shall be four thousand (4000) lb. mix, minimum five (5) to seven (7) percent air entrainment and a maximum six (6) inch slump. Concrete surfaces shall be thoroughly consolidated to remove air voids, lightly screened, broom finished, edged and protected from the elements. All construction materials and methods shall be consistent with the guidelines outlined in the applicable sections of the most current State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction.

The developer shall be required to receive permission from the Department of Technical Services to install any sidewalks during the period which extends from November 15th to April 15th.

#### **SECTION 12. DRIVEWAY APRON INSTALLATION.**

All driveway aprons to be installed on public rights of way in Commercial and Industrial zones shall be of eight (8) inch concrete of the same strength and installed in the manner prescribed for concrete sidewalks where applicable. The curb edge of the apron shall be trenched at least six (6) inches wide, the total concrete pour height shall be twenty (20) inches and the curb line grade shall be one and one-half (1 ½) inches above the gutter line of the road surface. The apron shall be the full width of the driveway with edges at a ninety (90) degree angle from the sidewalk edge for a distance of eighteen (18) inches and curving at a quarter circle turn to the road curb.

Driveway aprons in residential zones may be constructed of concrete bituminous concrete. Any concrete apron shall be six (6) inches thick and reinforced with wire mesh. Bituminous concrete aprons shall consist of a three (3) inch surface over a compacted six (6) inch process aggregate base.

The developer shall be required to receive permission from the Department of Technical Services in order to install driveway aprons during the period which extends from November 15th to April 15th.

**SECTION 13. VARIANCES.**

In new subdivisions or re-subdivisions where the size of the tract being developed, the number and size being created, and the current and probable future development of the area permit reduction of the standards without adversely affecting the general welfare, the Planning and Zoning Commission shall have the authority to vary the requirements with regard to width of right of way or pavement and installation of curbing and sidewalks set forth within.

Adopted by Town Council July 7, 1969 Amended Nov. 13,  
1972, Oct. 6, 1975 and Jan. 4, 1999