CHAPTER 917

Standards for Curbs, Sidewalks and Driveways

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CROSS REFERENCES

Power to establish and care for streets - see Ohio R.C. 715.19, 717.01, 723.01

Sprinkling - see Ohio R.C. 723.16 et seq.

Surface treatment - see Ohio R.C. 723.23, 723.31

Width of sidewalks - see S.U.& P.S. 905.02

917.01 DEFINITIONS.

- (a) "Contractor" means any person, firm, association or corporation performing any work under the terms of this chapter.
 - (b) "Inspector" means the authorized deputy, agent or representative of the City Engineer.
- (c) "Curb", "sidewalk" or "drive" means any curb, sidewalk or drive which is located in whole or in part within the boundaries of any duly dedicated public street, alley, thoroughfare or other public property within the City.
 - (d) "Work" means construction, removal, repair or replacement of any curb, sidewalk or drive.
- (e) "Person" means any individual, firm, association or corporation. (Ord. 216-1993. Passed 2-22-94.)

917.02 CONFORMANCE REQUIRED.

(a) The contractor, constructing, removing, repairing or replacing any curb, sidewalk or drive on any street, alley, thoroughfare or other public property shall conform to, furnish such materials, workmanship and perform such other obligations as are provided under this chapter and in strict accordance thereto.

(b) The City Engineer shall decide any and all questions arising as to the quality, acceptance of materials furnished or work performed.

(Ord. 216-1993. Passed 2-22-94.)

917.03 MATERIALS; WORKMANSHIP.

- (a) The materials used in performing the work shall be of the best quality and correct quantity in accordance with this chapter. All defective material shall be removed from the work and replaced with acceptable material.
- (b) All work shall be performed in a neat and acceptable manner, conforming to the best practices and with the approval of the City Engineer. Work found to be defective shall be removed and replaced.

(Ord. 216-1993. Passed 2-22-94.)

917.04 EQUIPMENT; INSPECTION.

- (a) All equipment or devices used on the work shall be such as used in standard practice and their use shall be governed by existing laws and ordinances.
- (b) All work shall be inspected by an authorized inspector. The contractor shall provide all the facilities requested of him by the inspector in the performance of his duties. (Ord. 216-1993. Passed 2-22-94.)

917.05 SAMPLES AND TESTS.

At the direction of the City Engineer, the contractor shall furnish such samples and provide such tests of materials to be incorporated in the work which, in the Engineer's opinion, are deemed of inferior quality or quantity as provided by this chapter. The contractor shall pay for the costs of such sampling and testing.

(Ord. 216-1993. Passed 2-22-94.)

917.06 SUBMISSION OF PLANS AND SPECIFICATIONS.

When, at the direction of the City Engineer, the work requires a detailed description, working plans and specifications, the contractor shall provide such information for the Engineer's approval or disapproval. The work shall not start until the Engineer has certified his approval of such plans or specifications, copies of which shall be retained for his record.

(Ord. 216-1993. Passed 2-22-94.)

917.07 GRADES AND ALIGNMENT.

Prior to the starting of construction, the contractor shall make application at the office of the Engineer for the establishment of such grades and alignment as may be required at the site of the work. No deviation from the grade or alignment so established shall be permitted without the expressed consent of the Engineer.

(Ord. 216-1993. Passed 2-22-94.)

917.08 PROTECTION OF WORK; IDENTIFYING SIGNS.

(a) The work shall be protected by the contractor against any damage until final acceptance. Covering, barricades, warning lights and signs shall be provided and maintained for this purpose. Existing structures, street signs, monuments, etc., which may be encountered during the progress of

the work shall be protected and, if damaged through negligence by the contractor, shall be replaced by him at his expense.

(b) During the period of construction, signs or such other identification means may be provided and maintained by the contractor. Such signs shall establish the name and address of the contractor or person performing the work.

(Ord. 216-1993. Passed 2-22-94.)

917.09 PROTECTION OF UTILITIES.

- (a) It shall be incumbent upon the contractor to provide all protection to utility company service lines and property, and, in the event such property is encountered and interferes with the work, the utility company shall be notified.
 - (b) No property shall be disturbed without the consent of the owning companies.
- (c) All utility lines should be marked prior to any work being started at owners' expense. (Ord. 216-1993. Passed 2-22-94.)

917.10 NOTIFICATION PRIOR TO CONSTRUCTION.

Before starting any construction, the contractor must notify the City Engineer twenty-four hours in advance in order that proper inspection may be provided. Should the contractor perform any work without giving prior notice as provided above, the contractor will be held responsible for the work done and if found not meeting the requirements of this chapter, shall be replaced at his expense. At completion of the work, the contractor shall leave the site in a clean and acceptable manner. (Ord. 216-1993. Passed 2-22-94.)

917.11 DELAYS.

The contractor shall expedite the work to completion. Any undue delays caused by his negligence shall be cause for the work to be completed by others at his expense, upon the determination by the City Engineer.

(Ord. 216-1993. Passed 2-22-94.)

917.12 LICENSE REQUIRED; FEE; BOND; EXCEPTION.

- (a) No person shall perform any work within the meaning of this chapter without having obtained a license from the City Engineer before any work is performed. (Ord. 216-1993. Passed 2-22-94.)
- (b) The fee for such license shall be one hundred twenty-five dollars (\$125.00) per year, or part thereof, and each renewal thereof. All licenses are to run for a period ending on December 31 in the year in which they are issued unless renewed. Each applicant for a license must file with the City Engineer a surety bond in the sum of ten thousand dollars (\$10,000) guaranteeing that the work he may do will comply in all respects the City specifications and provisions, all of which are made a part hereof, and to save the City harmless from any damage claims by reason of work done by the person, firm or corporation. A five hundred thousand dollar (\$500,000) liability policy must also be on file with the City Engineer and renewed yearly when requesting said license. (Ord. 64-2012. Passed 6-4-12.)

- (c) Only such persons, firms or corporations shall be given a license to construct or repair any sidewalk and/or curb or driveway on a public street or alley in the City as shall have furnished proof of their experience which may qualify them to do such work.
- (d) No license shall be required of any person who is the recorded owner of real property abutting upon any public street, alley, thoroughfare, or other public property for work to be performed by such person himself within the street, alley, thoroughfare or other public property upon which such real property abuts.

(Ord. 216-1993. Passed 2-22-94.)

917.13 PERMIT REQUIRED; FEES.

- (a) No person shall perform any work within the meaning of this chapter without first having obtained a permit from the City Engineer before any work is performed. (Ord. 216-1993. Passed 2-22-94.)
- (b) The permit shall be in such form as the Director may prescribe, and each permit shall be issued only upon the payment of a minimum permit fee of thirty dollars (\$30.00) for repairing. Additional re-inspection fee of seventy-five dollars (\$75.00) and permits issued after work is started the fee will be two times the original fee.

(Ord. 64-2012. Passed 6-4-12.)

- (c) All permits issued under this chapter shall be void after the expiration of ninety days from the date of issuance.
 - (d) The fee for each permit shall be as follows for the new construction:
 - (1) Sidewalk or curb line and grade stakes.

50 feet and under \$10.00 Over 50 feet 10.00 plus

.10 per foot over 50 feet.

(2) Sidewalk and curb - line and grade stakes.

50 feet and under \$10.00 Over 50 feet 10.00 plus

.10 per foot over 50 feet.

(3) Driveway line and grade stakes at property line.

Each permit \$5.00

(4) Reset stakes.

For each stake reset \$3.00

(Ord. 216-1993. Passed 2-22-94.)

917.14 LIABILITY OF CONTRACTOR.

The contractor shall be held strictly accountable for any damages, injuries or liability caused by his operations or in the performance of his work. The City and its officers or agents shall be saved harmless due to any such claims.

(Ord. 216-1993. Passed 2-22-94.)

917.15 SPECIFICATIONS FOR WORK ON CURBS, SIDEWALKS AND DRIVES.

All work of construction, removal, repair or replacement of any curb, sidewalk or drive within the meaning of this chapter shall be governed by the following specifications:

(a) Earthwork.

- (1) Excavation. Excavation shall include the removal and disposal of all materials encountered in providing the subgrade and for foundations for the curb, sidewalk or drive. The surface so prepared shall be free from water, spongy or organic material, and if such conditions are found, they shall be removed and replaced with acceptable subbase material. In no case shall the work be permitted to be placed on material of such nature.
- (2) Embankment. When it is required to raise the level of the existing ground to the proper alignment and grade for the work, gravel shall be furnished by the contractor for this purpose so as to provide sufficient width and/or depth for a stable subgrade.
- (3) Backfill. When the work has been constructed, the depression remaining after the removal of the forms or other items shall be filled with soil to a uniform surface meeting the grades of the new work.
- (4) Dimensions. Excavations shall be made of such size and depth to provide sufficient space to receive forms and materials to be incorporated in the work when brought to the established line and grade as hereinafter specified.
- (5) Trenching. Where it becomes necessary to excavate trenches for the installation or repair of sewer, water, gas or conduit lines or structures or fixtures connected with such lines, beneath curbs, sidewalks or pavements on any City property, the utility company shall be notified in advance before starting the work at the expense of the contractor.
- A. Such plans and/or specifications for the work shall be furnished to the City Engineer, as he may direct, for his approval.
- B. Trenches shall be filled with gravel to a uniform surface with the subgrade before any work is placed over them.
 - C. Protection shall be provided for existing structures and the maintenance of all traffic.
- (6) Grubbing. Where roots of brush or trees are found in the excavations, they shall be removed to such an extent that their future growth will not cause damage to the work.
- (7) Berm. Where the sidewalk is constructed next to the curb, the surface of ground back of the walk and to the property line of the street shall be brought to a uniform grade with that of the sidewalk. The surface of the ground beyond the property line shall be made on a one and one-half horizontal, to one vertical slope. Where the sidewalk is not constructed next to the curb, the surface between the walk and curb shall be graded to a uniform slope between them so as to provide good drainage from the walk.

(b) Materials.

(1) Concrete. All concrete used for the construction of concrete curbs, sidewalks and driveways shall have a minimum compression strength of 4,000 pounds per square inch at twenty-eight days and shall be mixed in the approximate proportions of one part Portland cement, two parts fine aggregate and four parts coarse aggregate. The sum total of the aggregate shall not exceed six parts of the total. The minimum amount of cement used shall be six sacks per cubic yard. The

consistency of the mix shall not exceed a six-inch slump test. Concrete must be mixed on the site of the work for a period of not less than one and one-fourth minutes or until the batch has been thoroughly mixed.

- (2) Asphaltic concrete. The materials used and the method of preparing asphaltic concrete shall be as provided by State of Ohio Department of Transportation Construction and Material Specifications, Item 404 Hot Mix, Hot Laid Asphaltic Concrete.
- (3) Premold expansion joints. Expansion joints shall be of the type as specified in State of Ohio Department of Transportation Construction and Material Specifications, Item 705, "Preferred fillers." They shall have a minimum thickness of three-eighths inch for full depth of walk or curb.
 - (4) Drains.
- A. Where vitrified pipe is used, the pipe shall be as specified in State of Ohio Department of Transportation Construction and Material Specifications, Sec. 604, "Vitrified Sewer Pipe."
- B. Where drain pipe is used, the pipe shall be as specified in State of Ohio Department of Transportation Construction and Material Specifications, Sec. 604, "Drain Tile."
 - C. All pipe shall have a minimum diameter of three inches.
- (5) Gravel backfill. Gravel used for subbase and fill under the walks, curbs and drives shall be crushed bank gravel, free from organic matter and shall contain not more than ten percent (10%) of clay or fine material.
 - (c) Concrete Sidewalks.
- (1) Dimensions. Concrete walks shall have a minimum thickness of four inches and a minimum width of four feet. For walks laid on public property less than four feet in width, approval must be obtained from the City Engineer per Section 905.01. All walks shall be cut by full depth template in uniform blocks of five feet in length, and at street intersections and closures, the blocks shall not exceed twenty-eight square feet in area.
- A. The walks shall be cut by full depth template over all roof drains unless otherwise authorized by the inspector.
- B. The standard elevation of the back edge of the walk above the top of the curb shall be one-half inch per lineal foot of the distance from the back edge of such walk to the face of the curb.
- C. Sidewalks shall be laid with a uniform slope of one-fourth inch per foot from the back edge of the walk toward the curb, except at intersections or to conform to existing walks.
- D. No patching of existing concrete or stone walks more than ninety square feet in area shall be permitted, except upon approval of the City Engineer.
- E. Where walks are constructed over manholes, vaults or other underground structures, detailed plans must be submitted to the City Engineer for approval prior to starting the work.
- (2) Subgrade. The subgrade for the walk shall be prepared as specified in subsection (a) hereof.
- (3) Gravel. Upon the subgrade, prepared as herein specified, shall be spread a foundation of crushed bank gravel in sufficient quantities as will insure a uniform thickness of four inches after being compacted by wetting, rolling, tamping or both wetting and rolling, per engineer's request.
- (4) Forms. Steel forms of exact dimensions for the walk shall be set and well braced to the established line and grade.
- A. Wooden forms shall not be permitted unless permission is obtained from the City Engineer.
- B. Steel forms shall be made of such gauge of steel plates that they will not become deformed during the progress of the work.
- C. For the use of templates, the forms must be provided with some device for holding the steel templates rigidly in their proper position during the placing and setting of the concrete and allowing the free and easy removal thereof at the proper time.

- D. The templates shall be constructed of steel plate three-sixteenths of an inch thick, made to conform to the thickness and width of the sidewalk and to extend above or beyond the forms for a distance sufficient to provide means for their easy removal.
- E. All forms and templates shall be coated with heavy paraffin oil on the sides next to the concrete before being used, and upon their removal for reuse, shall be immediately and thoroughly cleaned and given a coat of the oil before depositing the concrete.
- (5) Concrete. The concrete used for constructing the walk shall be as specified in subsection (b)(1) hereof.
- A. No concrete shall be used which has had its initial set, but must be placed in the forms immediately after being mixed.
- B. No concrete shall be placed in freezing weather. In the season when frosts are likely to occur during the night time, the contractor must amply protect the new concrete from such frosts and must assume all risks from freezing of the concrete.
- C. Concrete shall be thoroughly tamped in the forms and the coarse aggregate forced from the sides and top surface of the forms so that the mortar will flow to the faces and form a smooth, impervious surface.
- D. The contractor must protect the newly completed work from injury, from rays of the sun, wind or weather, or from any other cause, and shall keep the walk moist for at least three days after its completion or until it has firmly set.
- (6) Finishing. Prior to the initial set of the concrete, the top surface of the walk shall be worked so as to provide mortar for floating or troweling to a true and uniform plane. No pitted or uneven surfaces will be permitted. All joints and edges shall be rounded with an edging tool. Where, in the opinion of the City Engineer, the walk is constructed on grades that may be hazardous or slippery, the surface of the walk shall be treated with abrasives or roughened as directed.
- (7) Expansion joints. Expansion joints shall be provided as specified in subsection (b)(3) hereof.
- A. These joints shall be placed at the traverse joints of the walk at intervals not to exceed thirty feet in length.
- B. Where the walk abuts walls, steps, buildings, driveways or other fixed structures, expansion joints of such size and thickness shall be provided as directed.
- (8) Roof drainage. Prior to placing the concrete for the walk, drains shall be placed to provide roof drainage from adjacent buildings under the walk and to the curb. The drains shall be as specified in subsection (b)(4) hereof. The drains shall be laid on a true uniform grade to the gutter with no pockets or dips under the walk. Where necessary, they may be carried through the concrete of the walk with additional thickness of concrete in the walk.
- (9) Asphaltic concrete walks. The use of asphaltic concrete for sidewalks on public property shall first be approved by the City Engineer. When so approved, such sidewalk shall have a minimum thickness of five inches and dimensions and conditions as provided above for concrete sidewalks. At no time will asphaltic concrete be permitted on top of concrete sidewalks.
 - (d) Concrete Curb.
- (1) Dimensions. Circle curb shall be eight inches wide and eighteen inches deep with a one and one-fourth inch radius on the top edge adjacent to the roadway.
- A. Straight curb shall be six or eight inches wide and eighteen inches deep with one and one-fourth inch radius on the top edge adjacent to the roadway. The width of the curb shall be determined by the City Engineer in accordance with the volume of traffic using the roadways. On residential streets, six-inch wide curb shall be used, while on heavily traveled streets, eight-inch wide curb shall be used.

- B. All concrete curb shall be cut in uniform blocks not less than six feet or greater than ten feet, except at closures where the lengths shall not be less than five feet long.
- C. Integral or combined curb and gutter shall have the gutter apron a minimum of eighteen inches in width and eight inches in thickness. The curb shall be six inches or eight inches in width, as indicated for straight concrete curb, and a minimum of fourteen inches in depth. A cove with a two-inch radius shall be formed in the gutter at the intersection of the curb and apron, and the top corner of curb on the roadway side shall be on a curve with a one and one-fourth inch radius. The length of the blocks shall be as indicated for straight curb. Reinforcing steel of such size and spacing shall be used when directed by the City Engineer.
- (2) Subgrade. The preparation for the base of the curb shall be as specified in subsection (a) hereof.
- (3) Gravel. When the foundation has been completed, a four inch course of gravel, as specified in subsection (b)(5) hereof, shall be placed on the prepared grade, and, after the forms have been removed, six inches of gravel shall be placed for the full depth behind the curb.
- (4) Forms. Steel forms of exact dimension for the curb shall be set and well braced to the established line and grade. No wooden forms may be used unless permission of the City Engineer is obtained.
- A. Steel forms shall be made of such gauge steel plates that they will not become deformed during the progress of the work.
- B. No forms shall be used that are twisted or distorted, and all forms shall meet with the approval of the City Engineer.
- C. Steel templates must be provided with some device for holding rigidly in their proper position, during the placing and setting of the concrete, and allowing the free and easy removal thereof at the proper time. Standard steel forms are acceptable.
- D. All forms and templates shall be coated with paraffin oil before being used, and upon their removal for reuse, shall be immediately and thoroughly cleaned and given a coat of the oil before placing in trench or before pouring concrete.
- E. Plugs shall be inserted between the forms to form openings for roof drains. Such plugs shall be placed so as to provide at least one inch clearance above the gutter line.
- F. At driveways, the curb shall be formed to permit two inches of the curb to project above the gutter line of the street, and the sides of the drive on the curb shall be cut on a six-inch level.
- (5) Concrete. The concrete used for constructing the curb shall be as specified in subsection (b)(1) hereof.
- A. No concrete shall be used which has had its initial set, but must be placed in the forms immediately after being mixed.
- B. No concrete shall be placed in freezing weather. In the season when frosts are likely to occur during the night time, the contractor must amply protect the new concrete from such frosts and must assume all risks from freezing of the concrete.
- C. Concrete shall be thoroughly tamped or spaded in the forms and the coarse aggregate forced back from the face of the forms for a depth of twelve inches on the face and six inches on the back, so that mortar will flow to the faces and form a smooth, impervious surface. As soon as the concrete has sufficiently set so as to stand without distortion, the template and the forms shall be removed and the joints clean cut and the top and the face to a depth of twelve inches shall be immediately floated to a smooth and uniform surface. Where necessary, the curb will be neatly fitted to all catch basins and inlets.
- D. The contractor shall so arrange his work that the pouring of the concrete, the removal of the forms and finishing of the curb will be completed on the same day.

- E. The contractor shall provide sufficient forms so that the rotation of trenching, setting forms, pouring concrete, removal of forms and finishing can be carried on without delay.
- (6) Protection. The contractor must protect the newly completed work from injury from the rays of the sun, wind or weather, or from any other cause, and shall, when directed by the City Engineer, keep the curb moist for at least three days after its completion or until it has firmly set. Other curing methods may be used if approved by the City Engineer.
- (7) Causes for rejection. Any spalling or splitting of the finished surface, either at the joints or in the body of the stone, within six months of the date of paring shall be deemed sufficient cause for rejection, and any block so rejected must be replaced with a new one. No patching of any kind or dusting of dry cement upon the exposed surface of the curb shall be permitted.
- (8) Pavement replacement. All excavations in front of a straight curb and the apron of a combination curb and gutter shall be filled as follows:
- A. On gravel streets, coarse washed gravel to the level of the existing pavement shall be used.
- B. On oil-surfaced streets, coarse washed gravel to a depth of three inches lower than the existing pavement shall be used. The remaining three inches shall be filled and rolled with T-35 asphaltic concrete as specified in M-2, State specifications.
- C. On permanent pavement, the same material and depth as the existing pavement shall be used.
- (9) Asphaltic concrete curbs. Asphaltic concrete curbs shall not be placed on any public street or alley in the City unless authorized by the City Engineer.
 - (e) Concrete Driveways.
- (1) Any concrete driveway on a public street or alley shall be six inches in thickness from the property line to the face of the curb for the full width of such driveway.
- (2) The driveway, when constructed in conjunction with a sidewalk, shall be separated from such walk on each side of the driveway by means of steel templates for the full width and depth of the walk.
- (3) For residential driveways, the maximum width of single drives should not exceed twelve feet, except where a hazard may be encountered. For business driveways, a maximum width of thirty feet may be provided with a distance of at least twelve feet intervening between any adjoining drive.
- (4) The concrete curb at the entrance of the driveway shall be formed so as to provide a two inch gutter above the pavement line.
- (5) The grade of the driveway crossing the sidewalk must be at the same grade as the adjoining walk. No raising or lowering of the walk to that of the drive from the established grade of the walk shall be permitted unless authorized by the City Engineer.
- (6) The subgrade for driveways shall conform to specifications in subsections (a)(1) and (2) hereof.
 - (7) Concrete shall conform to specifications in subsection (b)(1) hereof.
- (f) Asphaltic concrete driveways shall be constructed of asphaltic concrete and shall be built with a total thickness of three inches after compaction, over six inches of aggregate base.
 - (g) Removal of existing stone or concrete curb for driveways.
- (1) Stone curb shall be chiseled off by a qualified contractor to a depth of two inches above the gutter line, cut off to a depth of six inches below the gutter line, or entirely removed and the excavation so made filled with concrete to a height of two inches above the gutter line.
- (2) Straight concrete curb or the curb section of a combination curb and gutter shall be removed entirely and the excavation so made filled with concrete to a height of two inches above the gutter line.

(Ord. 216-1993. Passed 2-22-94.)

917.99 PENALTY.

Whoever violates any provision of this chapter is guilty of a misdemeanor of the fourth degree. Each day in which a violation occurs or continues shall be deemed a separate offense. (Ord. 216-1993. Passed 2-22-94.)