



TOWNSHIP OF WOODBRIDGE

Curb and Sidewalk and Driveways Specifications

January 2022

JOHN E. McCORMAC, MAYOR

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**Specifications Prepared For:
Woodbridge Township Residents**

**Specifications Prepared by:
Department of Public Works,
Division of Engineering
1 Main Street, Woodbridge, NJ 07095**

Concrete Vertical Curb and Concrete Sloping Curb

Underlayer Preparation: Excavate using equipment and methods that remove material to the specified excavation limits without disturbing the material outside of the excavation limits. While excavating, protect facilities, structures and existing vegetation from damage and disturbance.

Constructing Forms: Each time before using, ensure that the forms are thoroughly cleaned and treated with a material that will prevent adherence of the concrete to the forms without discoloring the concrete. Construct concrete barrier curb in sections that correspond to the transverse joints in the existing or proposed pavement and at most 20 feet in length. Reduce this length where necessary for closures, but do not construct closure sections that are less than 6 feet. Where changes in the size or shape are necessary for variable height barrier curb, ensure that the transition between the sections is gradual.

Installing Joints: Place ½ inch preformed joint filler at the transverse joints and ensure that filler is flush with the top and face of the curb. Install ½ inch preformed joint filler between the curb and concrete pavement, and seal the joint with hot-poured joint sealer.

Placing Concrete: Obtain the Inspector approval of forms and joint placement before placing concrete. Place concrete according to the limitations. To place concrete between November 1 to March 15, submit to the Inspector for approval a plan detailing the method of protecting the concrete from salt for at least 30 days after placing. Do not begin placing concrete until this plan is approved.

Place concrete across the formed area to minimize rehandling. Continuously place concrete between transverse joints without the use of intermediate bulkheads. To prevent bowing or misalignment of the transverse joints, place concrete simultaneously on both sides of transverse joints without disturbing the joints.

Consolidate the concrete using internal mechanical vibrators. When required, supplement vibrating by hand spading to ensure proper and adequate consolidation. Provide at least an additional standby vibrating unit for individual concrete placements in excess of 10 cubic yards.

Use vibrators to work the concrete around the reinforcement steel and embedded fixtures and into corners and angles of the forms. Ensure proper vibration of the concrete to avoid honeycombing and voids. Do not use vibrators to move or spread concrete into position. Do not over vibrate concrete.

Place reinforcement steel and sleeves for sign posts while placing concrete, and ensure that they remain in position until the concrete is set. If a section is not completed from transverse joint to transverse joint, remove the incomplete section and replace. Terminate each day's placement at a transverse joint

Fill sleeves for sign or delineator posts installed in barrier curb with sand, and seal the sleeves with hot-poured joint sealer immediately after installation. Reseal the sleeves if and when posts are installed.

Finishing Concrete: Finish the top of the curb with a wood float and round the top edges. Remove the forms as soon as the concrete holds its shape, and immediately finish joint edges using an edging tool with a radius of ¼ inch. Remove lips of mortar and irregularities caused by form joints. Using mortar from the barrier concrete placement, patch holes, depressions, voids, and honeycombs to produce a smooth, dense, uniform surface of concrete. Finish the surface of the barrier curb with a steel float and texture with a broom.

If a rigid type of construction is to be made against any exposed surface, leave the exposed surface smooth and uniform to allow free movement of the curb.

Sidewalks and Driveways and Islands

Forms: Each time before using, ensure that the forms are thoroughly cleaned and treated with a material that will prevent adherence of the concrete to the forms without discoloring the concrete.

Sleeves: When signs or delineators are shown, place sleeves at locations shown on the Plans. Ensure that sleeves are flush with the finished surface. Fill the sleeves with sand. Seal the top ½ inch with hot-poured joint sealer immediately after curing concrete. Reseal the sleeves when sign or delineator posts are installed.

Welded Wire Mesh: When reinforcement is shown for sidewalks and driveways, ensure that the welded wire mesh is free of dirt, detrimental scale, paint, oil, or other foreign substances before placing. Ensure that the welded wire mesh is halfway between the top and bottom surfaces of the concrete.

Expansion Joints: Construct 1/2 inch wide expansion joints, placed at intervals of approximately 20 feet, with preformed joint filler. If the sidewalk, driveway, or island is constructed on a concrete surface, install expansion joints directly over the expansion joints in the underlying concrete surface. Construct expansion joints around all appurtenances, such as manholes and utility poles, and between new concrete and any fixed structure, such as a curb, walls, buildings, or bridges. Ensure that the expansion joint material extends for the full depth.

Clean the top and ends of expansion joint material of all excess concrete, and trim the expansion joint material slightly below the surface of the concrete.

Placing Concrete: Obtain inspector's approval of forms and joint placement before placing concrete. Place concrete according to the limitations. At least 30 days before placing concrete, submit to the Inspector for approval a plan for hot and cold weather concreting. Include the method that will be used to ensure that the temperature of the concrete is between 50 and 90 °F during mixing and placing.

Do not place concrete when precipitation is imminent as determined by the Inspector. If it begins precipitating during concrete placement, the Inspector may direct the Contractor to suspend placement operations and protect the plastic concrete. The Inspector will prohibit the placement of concrete when the ambient temperature is below 40 °F, unless all surfaces in contact with the concrete placement are preheated to between 50 and 80 °F and access is provided for measuring the temperature of the in-place concrete. For access, establish a ½ inch diameter hole that is 6 inches deep at a 45 degree angle by placing a greased bolt through the forms prior to concrete placement. If placement cannot be resumed within 30 minutes, the Inspector may direct the construction of a construction joint.

Finishing Concrete: Strike off the concrete using a transverse template resting upon the side forms to the required cross section. Finish the concrete using floats and straightedges to obtain a smooth surface. When the surface of the concrete is free from water and just before the concrete attains its initial set, texture with a broom. Round edges using an edging tool with a ¼ inch radius.

Divide the surface into blocks using a grooving tool. Ensure that groove lines coincide with expansion joints. Ensure that the grooves are cut to a depth of at least ½ inch. Finish the edges of the grooves using an edging tool with a ¼ inch radius.

Protection and Curing: Cure concrete using curing compound. Remove forms. Ensure pedestrians do not use concrete sidewalks, islands, and driveways until 24 hours after finishing. Ensure vehicles and other loads are not placed on sidewalks, islands, and driveways until the concrete has attained compressive strength of 3,000 pounds per square inch, as determined from 2 concrete cylinders field cured according to AASHTO T 23.

Backfilling: After removing the side forms, backfill the spaces along the edges of sidewalks and driveways with suitable material. Place this material in 5 inch lifts, and compact the layers until firm.

Permit: Road opening, sidewalk, curb and driveway permit is required before commencing work.

CONTRACTORS FOR CURB, SIDEWALKS, AND DRIVEWAYS

Mario Grano & Sons
715 Hanson Avenue
Perth Amboy, N.J. 08861
732-826-8654

Howard Paving
40 Stephenville Parkway
Edison, NJ 08820
732-259-8880

Lochiatto Paving & Masonry
1607 Rt. 27
Edison, N.J. 08817
732-548-7744

Mark Gallagher
129 Amboy Avenue
Woodbridge, N.J. 07095
732-727-7852

Milano Contractors
946 Inman Avenue
Edison, N.J. 08820
732-205-0151

Fazio Construction
33 West Ave.
Old Bridge, N.J. 08857
732-416-0080

Hector Pujols Construction
113 Gordon Street
Perth Amboy, N.J. 08861
848-203-7123

Zingariello & Son Masonry & Paving
357 Wood Ave.
Edison, N.J. 08820
732-494-5692

Aquila Landscaping
643 E. Woodbridge Avenue
Avenel, NJ 07001
732-780-4466

AB-AL Construction, LLC
72 Wood Ave.
Manalapan, N.J. 07726
732-446-1534

Sandro Construction
1697 Bridge Street
Rahway, NJ 07065
Keith – 732-259-6576

Ted's Excavating
P.O. Box 6308
Freehold, NJ 07728
732-616-5816

Tri-State Paving
11 Warwick Rd.
Edison, NJ 08820
732-549-7242