

CITY SPECIFICATIONS

SECTION 5 – SIDEWALK WORK

5.03 REMOVE AND RESET BRICK SIDEWALK

5.04 FURNISH AND INSTALL BRICK SIDEWALK

DESCRIPTION

The Contractor shall furnish all labor, materials, tools, and equipment necessary to Remove and Reset or Furnish and Install Brick Sidewalk. All work shall be in accordance with The Rhode Island Standard Specifications for Road and Bridge Construction, amended December 2010 with all latest revisions. The Contractor shall notify the various utility companies (gas, water, electric, telephone, etc.) to coordinate work on or near their respective structures.

MATERIALS

Portland Cement Concrete shall be Class XX as specified within Section 601 of The Rhode Island Standard Specifications for Road and Bridge Construction, amended December 2010 with all latest revisions.

New bricks shall be Boston City Hall pavers as manufactured by Stiles & Hart Brick Company.

All Bricks shall be set on one (1) inch of stone dust on top of the concrete base (to be included under this item). All sidewalks shall be brick set over stone dust and five (5) inches of concrete in thickness. All driveways and wheelchair ramps shall be brick set over stone dust and eight (8) inches of concrete in thickness.

CONSTRUCTION METHOD

It shall be the responsibility of the Contractor to carefully remove the designated sidewalk so as not to damage any adjacent concrete not intended for removal. If any damage occurs to such slabs, it shall be the responsibility of the Contractor to replace those slabs with new concrete at their expense. The sidewalk slabs that are to be replaced will be marked by the Engineer and all joints between new work and existing slabs shall be cut straight with the use of a saw.

The Contractor shall also exercise due care not to injure trees during excavation. The Contractor shall protect trees with boards, burlap, padding or other protective material as may be required to avoid injury. After the existing concrete has been removed, roots within the construction area shall remain undisturbed unless otherwise directed by the City Tree Warden. All work shall be done as directed by the City Tree Warden or their designee.

Where the areas to be replaced contain manhole covers, curb boxes, or other utility structures, it shall be the responsibility of the Contractor to properly reset those utilities to grade, or to contact the respective utility company for them to do the same. Payment for this procedure is to be included under their respective items. Adjusting utility boxes and services shall be considered incidental.

It shall be the responsibility of the Contractor to immediately remove from the site all excavated concrete and to dispose of it in the proper and legal manner.

Any damage caused by careless excavation deemed so by the Engineer shall be replaced by the Contractor at their own expense.

Existing brick sidewalks shall be excavated with care so that the materials are not damaged and may be reset. Care must be taken while removing and storing the existing bricks. Any pavers damaged or lost by the Contractor shall be replaced in kind and at the Contractor's expense. The Contractor shall dispose of any broken or damaged bricks rejected by the Engineer. It shall be the responsibility of the Contractor to purchase new brick to maintain existing limits (which shall be included under this item). New pallets of pavers shall be mixed with salvaged pavers to disperse color deviation. Bricks shall then be reset and paid for under this item.

The Contractor shall protect removed pavers from damage and store them in a safe manner.

Where no concrete base exists, the subbase shall be excavated as directed to allow for the new concrete base. Crushed processed gravel may be required if the subbase is deemed unsuitable. After the approved gravel base has been thoroughly compacted and fine graded, forms shall be placed such that wet concrete shall not be placed directly against loam, fencing, plants, or stones. Forms shall be of sufficient strength to hold their shape and to assure true alignment of the finished concrete. They shall extend to the full depth of the concrete. Forms shall be placed such that a pitch of 1.5% from the curb to the back of sidewalk is attained. For wheelchair ramps, forms shall be placed such that the ramp meets all Federal, State, and local ADA requirements.

Subbase concrete shall meet the standards for City sidewalks, driveways and wheelchair ramps. Weep holes shall be included in the concrete base per standard detail and is considered incidental to item.

Cement shall conform to Standard Specification of ASTM Designation C-150, latest revision, for Type 1 Portland Cement. Fine aggregate for concrete shall be well-graded natural sand, and coarse aggregate shall be crushed stone or gravel. They shall conform to Standard Specifications of ASTM Designation C33-44, for concrete aggregates. Coarse aggregate shall be of designated size "1-inch to No. 4" in accordance with the gradation for that range of sizes in ASTM Specifications referred to above.

For concrete and/or brick constructed within the vehicular travel way or driveway, a minimum of 24 hours curing time (from the last constructed) shall be required before vehicular use. The Contractor shall provide all signs, cones, and barricades necessary to protect the concrete and/or brick. **The Contractor shall notify Property owners or residents at least 24 hours prior to disturbing driveways.**

Any damage caused by excavation of a sidewalk shall be the sole responsibility of the Contractor. Care shall be taken when excavating any sidewalk or objects as to no disturb existing buildings, foundations, utilities, or any other existing structure etc.

After the concrete base has been poured and cured properly, the paver shall then be reset on a one (1) inch bed of stone dust in a tight fitting, running bond pattern, and any segments of brick shall be cut in an approved manner. No gaps wider than ¼" shall be permitted between bricks, or where they meet curb, foundations, walls, other sidewalks, or utility structures. Where there is no such hard surface to contain the brickwork, install 1" x 4" pressure treated timber as backing. Stone dust shall be swept into all brick joints to completely fill all voids. All brickwork shall be compacted with vibratory equipment on top of a stone dust protective layer that shall be removed after completion of compaction.

METHOD OF MEASUREMENT

Remove and Reset or Furnish and Install Brick Sidewalk will be measured on a "Per Square Yard" basis by the area of sidewalk/roadway actually removed and installed in accordance with the Plans and/or as directed by the Engineer. Only the square yardage of the newly constructed sidewalk/roadway shall count towards the measurement of this item.

BASIS OF PAYMENT

Remove and Reset or Furnish and Install Brick Sidewalk shall be paid for at the respective contract unit prices "Per Square Yard" as listed in the Proposal. The prices so-stated constitute full and complete compensation for all labor, materials, and equipment associated with (but not limited to) saw-cutting, excavation and legal disposal, placing and compacting Crushed Processed Gravel or Excess Reclaimed Material as directed by the Engineer, hauling, loading/unloading, trimming and fine grading, mechanical compaction, setting forms, and furnishing, placing Portland Cement Concrete to the required thickness, then removing forms, backfilling, furnish and installation of stone dust, furnish of bricks as directed by the Engineer, resetting of bricks, clean-up, the legal disposal of all surplus excavated and/or unsuitable material and all other incidentals required to finish the work, complete and accepted by the Engineer. Any castings damaged shall be replaced at the Contractor's expense.

The excavation and disposal of sidewalk panels or concrete base material shall be included in this item. Furnish and Install Crushed Processed Gravel, Loam and Seed, and Bituminous Concrete Pavement Non-Mechanical shall be paid for under their respective items.

Adjusting utility boxes and services shall be considered incidental.