

ITEM 660.33XX M CURB STOP AND CURB BOX

DESCRIPTION

Work shall consist of installation of new water service curb stops and curb boxes; or adjusting elevation of water service curb boxes to conform to the new grades and replace any portion of the existing curb box that is necessary to adjust it; as shown on the plans and as directed by Resident Engineer.

REFERENCES

ANSI/AWWA C800 - Underground Service Line Valves and Fittings.

ANSI/AWWA C901 - Polyethylene (PE) Pressure Pipe and Tubing for 1/2-inch through 3-inch, for Water Service.

ASTM B88 - Standard Specification for Seamless Copper Water Tube.

DEFINITIONS

Curb stop: Valve installed in water service line that connects company service to customer's service and is operable from ground surface. Used for stopping flow of water through customer service line and installed at right-of-way or easement line unless directed otherwise by the Resident Engineer.

MATERIALS

GENERAL

Curb stop and box manufacturers and models shall be as approved by Resident Engineer, prior to installation. For curb box adjustments, replacement parts shall be made by the original manufacturer of the curb box or an approved equal.

Size of curb stop shall be same size as existing service pipe, with minimum size being 25 millimeters.

CURB STOPS (25 MM)

MATERIAL

Fabricated from metal alloy red brass 85-5-5-5 in accordance with chemical and mechanical requirements of ASTM B62, ground key, ball or cylinder plug valve type with compression inlet and compression or iron pipe female outlet as required.

Manufacturers:

1. A.Y. McDonald: 6100-T or 6102-22
2. Ford: B41-333, B41-444, B44-333 or B44-444
3. Hays: 4302CF or CJ, 4304CF or CJ

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4. Jones: J-1949
5. Mueller: H-1504-2, B-25209 or B-25172

CURB STOPS (38 MM AND 51 MM)

MATERIAL

Fabricated from metal alloy red brass 85-5-5-5 in accordance with the chemical and mechanical requirements of ATSM B62, ball valve type with compression inlet and compression or iron pipe female outlet.

Manufacturers:

1. A.Y. McDonald: 6100-T or 6102-T
2. Ford: B41-666, B41-677, B41-777, B44-666, B44-677 or B44-777
3. Hays: 4302 CF or CJ, 4304 CF or CJ
4. Mueller: B-25209

CURB BOXES (32 MM)

MATERIAL

Curb box: arch pattern extension type with a 1.7 m bury, 1.7 m maximum extended length and compressed minimum length of 1.4 m. Bottom section arch must fit 19 mm and 25 mm ball valve curb stop, with a 38 mm upper section.

Lids: cast-iron with a threaded brass sleeve insert and brass pentagon head plug. "WATER" cast in raised letters on lid.

Curb rods: 16 mm outside diameter by 1.1 m or 1.2 m length, "S" type, with a yoke end of ductile iron, hot swedged onto rod.

Cotter Pin: brass.

Manufacturers:

1. A.Y. McDonald: 5604, with 5614-L lid
2. Ford: EA-2, with type PL lid
3. Sames: D-4P, with type D-210 lid

CURB BOXES (ENLARGED BASE)

MATERIAL

Adaptable with lower section of 32 mm arch pattern curb boxes and sized to fit over 38 mm and 51 mm ball curb stops manufactured by A.Y. McDonald, Ford, Hays and Mueller.

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Manufacturers:

1. Bibby-Ste Croix: B-2101
2. Ford: CB-7

BEDDING, BACKFILL AND SURFACE RESTORATION

Bedding, backfill, and surface restoration materials and method of placement shall conform to requirements of MCDOT Item Specification 660.06XXXX.

CONSTRUCTION DETAILS

GENERAL

Verify that a Notice from Health Department has been submitted, in writing, to MCWA stating that the health sample for distribution main is satisfactory.

Verify location and disposition of all water services before beginning work. Ensure that all labor, equipment and materials are on site prior to replacement or transfer of service.

The Monroe County Water Authority (MCWA) shall be notified at least two (2) working days in advance of doing any work. If requested, MCWA will check operation of the curb stops. All curb stops are to be operated only by authorized representatives of MCWA.

Prior to any disruption of service, all affected water service customers shall be notified by the Contractor at least 24 hours in advance of disruption and if necessary shall be provided with temporary water service.

Records of all new, replaced and transferred water services shall be obtained. Such records shall identify for each service the address and coordinate location of the service, material used, length, depth and size of new copper service, and location of the corporation stop and curb stop. This information shall be recorded on standard water service cards, obtained from MCWA, and submitted to MCWA's project representative, 475 Norris Drive, Rochester, New York 14610.

INSTALLATION

Pavement saw cutting shall be required prior to all water service work, except in areas of reconstruction. All street cuts shall be made by a pavement saw and shall conform to requirements of MCDOT Item Specification 502.5014.

Excavation shall only be to length, width, and depth necessary to install a new curb box at an existing curb stop, or to install a new curb stop and box, or to remove an existing curb box. Excavation shall conform to the requirements of NYSDOT Standard Specifications, Section 206, latest revision.

Install all service materials, including corporation and curb stop at a minimum depth of

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cover of 1.5 m. Locate new curb boxes on right-of-way or easement line. Avoid locating new curb boxes in sidewalks, pavement, lawn areas between street curb and sidewalk ("tree lawns") or driveways unless approved in writing by the Resident Engineer.

Avoid locating couplings under pavement or sidewalks unless approved in writing by the Resident Engineer.

Place new curb stops in the trench on a precast solid concrete block support at an elevation to provide a minimum cover of 1.5 meters over service pipe. Pressure test installation under line pressure in presence of Resident Engineer, prior to backfilling. Installation shall be made watertight.

All curb boxes shall be carefully set and braced to insure that they remain in a vertical position centered on curb stop during and after backfilling. Maintain proper alignment and height of all new or adjusted boxes, until completion of project. Top of curb box shall be flush with finished surface grade. Backfilling of trench shall be done in a manner so as to avoid damage to service pipe, curb stop and curb box.

Upon completion of the work, backfill the excavation and restore disturbed surface area.

NEW CURB STOP AND BOX AT NEW SERVICE

Connect new curb stop and curb box to new service pipe as required, and remove existing curb stop and curb box.

NEW CURB BOX ASSEMBLY

Replace existing curb box assembly with a new curb box assembly. Prior to installation, check curb stop for proper operation. Replace defective curb stops as ordered by Resident Engineer.

ADJUST EXISTING CURB BOX

Adjust curb box to new grade by one of the following methods. Contractor shall select the method that is best suited for each individual curb box adjustment:

1. A 32 mm diameter curb box extension nipple and coupling may be added to the top of existing curb box.
2. Curb box may be adjusted by sliding up or down as applicable.
3. Any other method approved by the Resident Engineer.

After adjustment, the top of the curb rod shall be no more than 900 mm and no less than 150 mm from finished grade. Existing water service curb boxes that are damaged, broken, bent, or shifted from true alignment by Contractor's operations, must be repaired, replaced or re-aligned by the Contractor at no cost to the Monroe County Department of Transportation or Monroe County Water Authority.

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METHOD OF MEASUREMENT

NEW CURB STOP AND BOX AT NEW SERVICE

Quantity to be measured under this item shall be the number of curb stops and boxes actually installed.

ADJUST EXISTING CURB BOX

Payment will be made for each water service curb box adjusted as directed by the Resident Engineer. No payment will be made under this item for any curb box adjusted under another item.

BASIS OF PAYMENT

GENERAL

Unit price bid shall include cost of: verifying location and disposition of services; preparation and submittal of service record information and cards; pavement saw cutting; and furnishing all labor, material and equipment necessary to complete the work.

NEW CURB STOP AND BOX AT NEW SERVICE

Unit price bid shall include cost of: excavation and placing of bedding and select granular backfill; furnishing and installing curb stop; curb box assembly; concrete block; connecting to water service pipe; pressure testing curb stop; final adjustment of curb box to satisfactory grade and alignment; fittings and materials necessary to connect curb stop; and removal of existing curb stop and box, and water meter box where required.

ADJUST EXISTING CURB BOX

Unit price bid shall include the cost of furnishing all labor, equipment and material including replacement parts, excavation and backfill necessary to complete the work.

EXCAVATION, BACKFILL AND SURFACE RESTORATION

Excavation, furnishing and placing of bedding and select granular backfill, and surface restoration will be included in unit price bid for item as indicated in item description. No separate payment shall be made for placement of select backfill excavated from the trench.

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Payment will be under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
660.3302 M	New Curb Stop and Box, 25 mm Diameter (including excavation, backfill and surface restoration)	EA
660.3303 M	New Curb Stop and Box, 51 mm Diameter (including excavation, backfill and surface restoration)	EA
660.3304 M	New Curb Stop and Box 25 mm Diameter	EA
660.3305 M	New Curb Stop and Box 51 mm	EA
660.3306 M	Adjust Existing Curb Box	EA