



TO: GENERAL CONTRACTORS
PLUMBING CONTRACTORS

FROM: CITY OF MURFREESBORO BUILDING AND CODES DEPARTMENT

DATE: JANUARY 3, 2020

RE: NEW INSPECTION PROCEDURES FOR WATER AND SEWER LINES OUTSIDE OF BUILDING

Contractors and Plumbers:

Attached is a memo from the MWRD (Murfreesboro Water Resource Department) concerning inspections of the water and sewer lines that are outside of the building. This memo explains the inspection process for both the building sewer and water lines.

Please read the information and discuss this process with your employees who request inspections for the exterior water and sewer lines. Following these instructions will reduce delays in inspections and issuance of Certificates of Occupancy.

The most significant change is at the final inspection process and is summarized as follows: Currently, when MWRD discovers a damaged pipe or gravel inside the sewer pipe, they make the repairs and pass the costs onto the contractor. The policy going forward is that the contractor will have to pay re-inspection fees, make the repairs, clean-out the sewer lines and provide the MWRD with video confirmation that the lines are cleared. All re-work must be inspected prior to covering up the work and inspected again after it is completed. We will not issue any type of Certificate of Occupancy until the sewer line has been repaired and approved by MWRD.

If you have any questions, please contact Donald Hughes or Jimmy Stacey at (615) 892-1223.

MEMORANDUM

DATE: December 2, 2019
TO: **Contractors & Plumbers**
FROM: Donald Hughes/Jimmy Stacey
MWRD Operations & Maintenance
SUBJECT: Plumbing Inspections

Water Resources Operations & Maintenance (O&M) Department has performed all plumbing inspections of the water supply & building sewer from 5' of the building foundation to the City sewer cleanout and/or the City water meter connection respectively for 2 years. Building and Codes (B&C) Inspectors have been and will continue to inspect inside the building. All inspections must be called into the B&C Department. B&C will notify O&M of inspections through the Blue Prince software.

Prior to these inspections, the Department will verify that tap and/or connection fees have been paid. If the fees have not been paid, then notes will be added to the Blue Prince system and inspections will be delayed.

INITIAL INSPECTIONS

BUILDING SEWER

1. Pursuant to Section 33 Article III of the City Code, the 2018 International Residential Code (IRC) and 2018 International Plumbing Code (IPC), the Water Department will follow these guidelines with respect to sewer inspections and will put emphasis on the following:
 - a. Water and sewer lines will be inspected at the same time where applicable.
 - b. The building sewer shall be 4" minimum from the building to the Department's cleanout.
 - c. Only **ONE** horizontal offset (2 fittings) shall be permitted and cannot be within 10' of the Department's cleanout. The word offset is defined as "a combination of fittings that make two changes in direction bringing one section of the pipe out of line but into a line parallel with the other section".
 - d. Only **ONE** vertical offset (2 fittings) shall be permitted and cannot be within 5' of the Department's cleanout. The word offset is defined as "a combination of fittings that make two changes in direction bringing one section of the pipe out of line but into a line parallel with the other section".
 - e. No 90° bends will be allowed.
 - f. The last five (5) feet shall be laid straight and at the required grade of 1%.
 - g. Leave a space of 30"- 36" between the building sewer and the Department's tap.

- h. All building sewer shall be laid on six (6) inch of gravel bedding (#67 stone (3/4") and smaller) and shall have gravel backfill six (6) inches on the sides and above the top of pipe.
 - i. For testing, a minimum 10' water stack or 5 lbs. of air pressure must be held for a minimum of 15 minutes.
 - j. A Notice of Additions and/or Corrections form will be posted by O&M at the job site at an accessible location outside of the house. The general contractor will be responsible for notifying the sub-contractor. The Notice will list the reason for failure and/or additional work necessary to pass inspection.
 - k. The same Notice will be used as notice for an approved or passed inspection.
 - l. If sewer is approved, a cleanout will be installed at the time of inspection.
 - m. The contractor must call O&M to request a cleanout box after backfilling around the cleanout. Specify if a traffic rated box is necessary.
 - n. **IF THE CLEANOUT IS DAMAGED.....see #4 under FINAL INSPECTIONS.**
2. Under the current adopted plumbing code, the City of Murfreesboro requires the minimum floor elevation (M.F.E.) to be set at or above the top of casting elevation of the nearest manhole that is upstream of the sewer service connection. The homeowner shall install a backwater valve per the plumbing code and execute and record a release of indemnification against the City of Murfreesboro with regards to the sanitary sewer connection. The builder and/or homeowner shall be responsible for compliance with this requirement. If the requirement is contested, it shall be the responsibility of the owner to verify the elevation of the finish floor elevation by a licensed land surveyor. The Department will prepare and have executed by the owner the Release and Indemnification Agreement. The owner shall provide to the Department a copy of the deed for the property for the preparation of the agreement.

WATER SUPPLY

1. Pursuant to Section 33 Article I of the City Code, the 2018 International Residential Plumbing Code (IRPC) and 2018 International Plumbing Code (IPC), the Water Department will follow these guidelines with respect to water supply inspections and will put emphasis on the following:
 - a. Water and sewer lines will be inspected at the same time where applicable.
 - b. A minimum 1" water supply line is required from the water meter to the first water heater.
 - c. All water supply shall be laid on six (6) inch of gravel bedding (#67 stone (3/4") and smaller) and shall have gravel backfill six (6) inches on the sides and above the top of pipe.
 - d. A PVC casing pipe can be used in lieu of the stone envelope.
 - e. The meter setter and water meter shall be installed so there is a minimum 6" from the top to the meter to the top of the meter box and a maximum depth of 10" from the top of the meter to the final grade elevation.
 - f. Water supply lines shall be tested under water pressure of not less than 75 psi or by air test of not less than 75 psi for 15 minutes minimum.

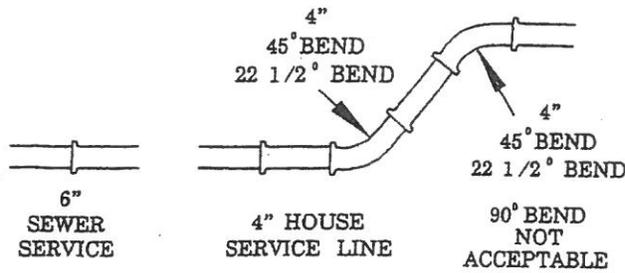
- g. A Notice of Additions and/or Corrections form will be posted by O&M at the job site at an accessible location outside of the house. The general contractor will be responsible for notifying the sub-contractor. The Notice will list the reason for failure and/or additional work necessary to pass inspection.
- h. The same Notice will be used as notice for an approved or passed inspection.

FINAL INSPECTIONS

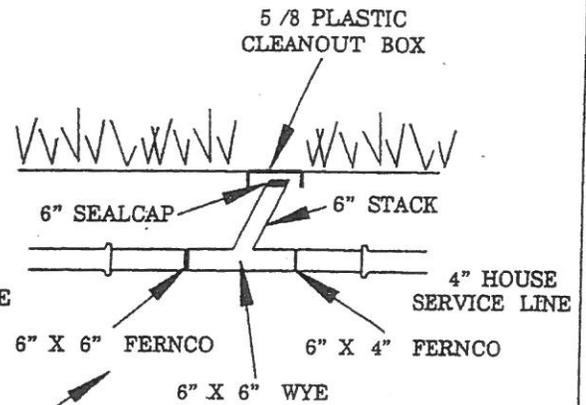
1. Contractor must call the B&C Department to request a final inspection of the water line/meter box and sewer line/cleanout box after yard work is completed. No requests directly from contractors will be accepted.
2. Cleanout boxes and meter boxes must be finished grade before requesting a final inspection and tolerances listed above regarding the meter box must be met.
3. If final inspection of the water line/meter box and the sewer line/cleanout box are acceptable, O&M will notify B&C Department. If water line/meter box and sewer line/cleanout box are not satisfactory, the Department will require a "hold" be placed on the Certificate of Occupancy.
4. If during final inspection or at any time O&M has determined the building sewer or cleanout has been damaged by the builder or subcontractors, **it will be the builder's responsibility, and at his expense, to provide like materials and repair the building sewer and/or cleanout, and to pay a \$75 re-inspection fee to Building & Codes.** Prior to backfilling the MWRD will inspect the repairs, but only after the re-inspection fee has been paid. If gravel/stone is seen in the building sewer or sewer main, the builder will be required to clean the building sewer and sewer main(s) and televise all by a 3rd party CCTV Company at his expense. The builder may also be required to re-test the building sewer. Once repaired and cleaned, the 3rd party CCTV Company must submit the video to Murfreesboro Water Resources Engineering for review to make sure the repair and cleaning is satisfactory. **These requirements are all PRIOR TO CERTIFICATE OF OCCUPANCY.**

30" TO 36" GAP SHOULD
BE LEFT SO THAT CLEANOUT
MAY BE INSTALLED.
6" AND 4" SHOULD HAVE
LINE/GRADE SO THAT C.O. MAY
BE INSTALLED.

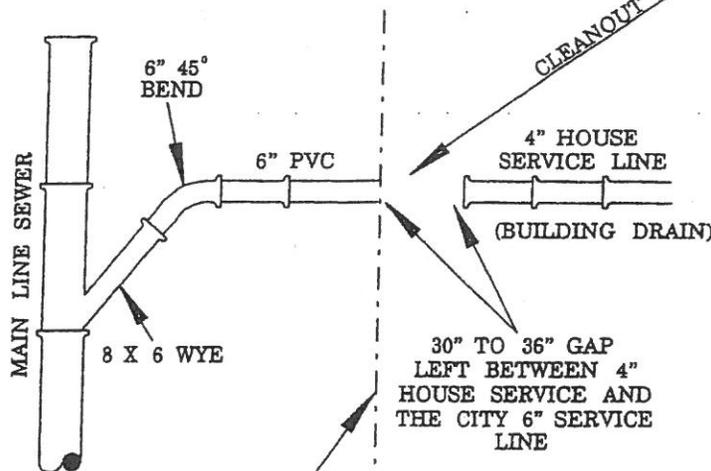
STACK/SEAL CAP SHOULD
BE 6" TO 10" BELOW
FINISHED GRADE.
C.O. BOX SHOULD BE AT
FINISHED GRADE.



ELEVATION



ELEVATION



PLAN

NOTES:
PLUMBER USE CORRECT ALIGNMENT
MINIMUM SLOPE OF 1/8" TO 1'
FINAL CONNECTION TO BE MADE
BY MWSD, AFTER BUILDING DRAIN
IS INSPECTED AND ACCEPTED BY
THE PLUMBING INSPECTOR.

DRAWING NOT TO SCALE

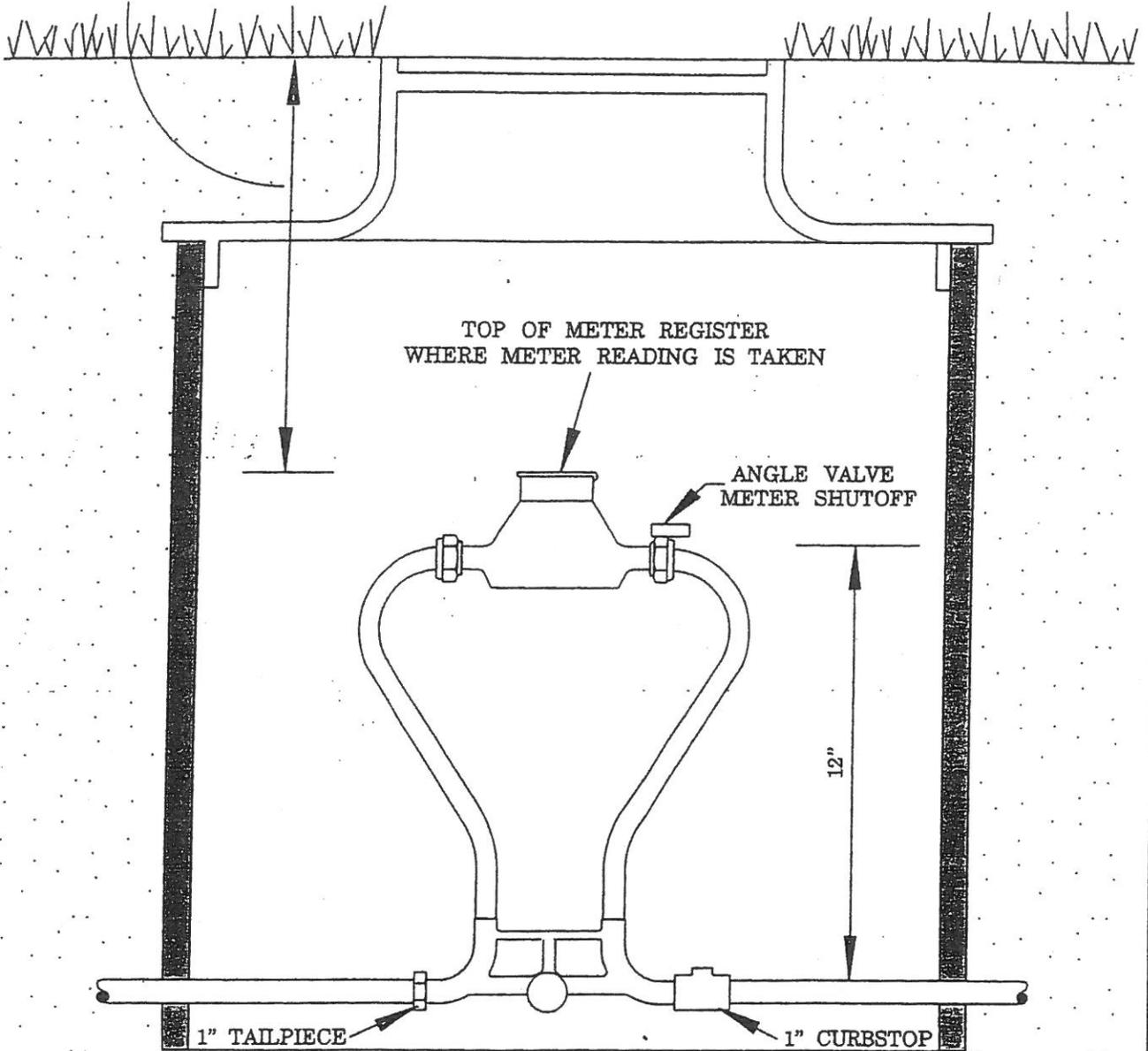
NOVEMBER 25, 1997
DRAWN BY: EMAV
APPROVED BY:

RESIDENTIAL
SANITARY SEWER
SERVICE

STANDARD
DRAWING NO.

MURFREESBORO WATER RESOURCES

TOP OF METER SHOULD BE A
MINIMUM OF 6" TO MAXIMUM
OF 10" BELOW FINISHED GRADE



DRAWING NOT TO SCALE

NOVEMBER 25, 1997

DRAWN BY: EAMV

APPROVED BY:

WATER METER SETTER

STANDARD
DRAWING NO.

MURFREESBORO WATER RESOURCES



WATER RESOURCES DEPARTMENT
 1725 South Church St. • Murfreesboro TN 37130
 615-893-1223

FINAL INSPECTION

Water Passed YES NO
 Sewer Passed YES NO

Date: _____

Address: _____

Subdivision: _____

Lot: _____

RESIDENTIAL

COMMERCIAL

CORRECTION REQUIRED:

- Vertical alignment
- Horizontal alignment
- Unsafe ditch
- Grade on 4" pipe unsatisfactory
- Conflict with future sidewalk
- Insufficient line cover (water)
- Insufficient separation of utility lines
- 6" Stone under & over sewer line

- Meter box not to grade
- Cleanout box not to grade
- Floor elevation below street level
- Water tightness test failed
- Backwater valve required
- Risers not to grade
- Incorrect tank location
- 1" Stone around tank

COMMENTS:

After corrections are made, call Building & Codes 615-893-3750 to schedule re-inspection prior to concealing lines.

Inspector Name: _____

Unit Number: _____