

# ***Rye Water District Service Line Installation / Repair Requirements***

## **Responsibilities:**

- a. The contractor, under the supervision of a Rye Water District representative, may excavate to the water main. The (RWD) will tap the water main and install a corporation valve into the main for 1 inch taps, larger service taps will be the responsibility of the owner/contractor to provide a certified contractor to perform tap/s. Installation of a service line to the curb valve will be done by either the contractor or the (RWD). Installation from the curb valve to the inside of the building shall be the responsibility of the contractor, under the supervision of a (RWD) representative. The contractor/owner must contact the (RWD) five days in advance prior to any installation or repair. The contractor/owner is responsible for obtaining all necessary permits to perform work as well as perform work during operational times set forth by the (RWD). Excavation shall only be allowed between April 15 to November 15, during the hours of 8:00 am to 4:00 pm Monday thru Friday. No work will be allowed on weekends or holidays unless pre-authorized by the (RWD). Work performed during these times without prior authorization will not be approved and water service will not be established.
- b. ***Any and all excavation in the Town Road right of way and or State Road right of way requires an excavation permit from the Town of Rye Public works Dept. and or the State of N.H. D.O.T.***
- c. ***Septic plans of the property at which service line is to be installed or repaired as well as adjacent properties shall be required prior to work being performed.***
- d. **All existing services are subject to meet current requirements if repairs are being made to a point that the (RWD) deems it necessary to make said service compliant with regulations.**

## **Meter and Service lines:**

Service pipes and fittings shall be provided by the contractor/owner and conform to (RWD's) requirements (see **Material Requirements**). Materials will only be provided by the (RWD) to the contractor/owner with pre-approval and a pre-approved account. The (RWD) will not determine size of meter necessary for service line application, however, will regulate the size of meter with their discretion. The meter size will be pre-determined prior to acceptance of service application. A (RWD) representative will install the water meter and any and all required fittings. Cost of fittings to be borne by the property owner. Service lines extending over 100 feet from the street shutoff valve to the building will be required to install a (RWD)-approved meter pit. No meter shall be installed in a vault or location which requires confined space entry technics. Meter pits will also be required when meter location in building cannot meet the (RWD's) requirements. An assessment of meter location will be made prior to service connection, as well as repairs. Assessment on a repair may constitute service line relocation, modification to meter location and/or meter pit installation. No more than one customer shall be served from a service line under control of a single curb stop or shut off. Service lines shall not be less than 1 inch in diameter unless approved by the (RWD).

## **Backflow Device/s:**

All services will be required to be equipped with an approved **Backflow Device** in accordance with the Rye Water District's cross connection control program. Testable devices will require a permit from the Rye

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Water District prior to installation. The backflow device shall be installed at the meter location unless otherwise approved by the (RWD).

## **Depth of Bury/Other Utilities and Fittings:**

- a. Underground service from the street to inside the building shall be installed a minimum of five feet below grade. When the minimum depth cannot be met the contractor/owner shall be responsible for providing the necessary means to protect against freezing. Only compression-type fittings are allowed. No flared or solder joints are permitted from the water main to the inside of the house nor plastic pipe with glue type joints. Splices between main and curb valve are not allowed. Stop and waste curb valves and any leaded brass is prohibited. The owner is responsible for protection against water line freezing whether when in service or not.
- b. No water service line shall be laid in the same trench with any other utility, whether commercial or private, as well as within three feet of any open excavation or vault. All electric, telephone and cable wires must maintain a minimum of six feet from all water service lines, shutoff valves, curb valves, and meter pits when running parallel. Wherever electric, telephone and or cable lines cross service lines they must be in conduit encased in concrete. The concrete shall extend laterally for a minimum distance of five feet either side of the water service line. All service pipe installation shall comply with NH State Regulation ENV-WS #1008.04 (setbacks).

## **Separation of service lines and sewer/septic**

### **Parallel Installation:**

- 1) **Normal conditions-** Service lines shall be laid at least ten feet horizontally from any sanitary sewer, storm sewer or sewer manhole and at least 25 feet from a septic field, whenever possible; the distance shall be measured edge to edge.
- 2) **Unusual conditions-** When conditions prevent a horizontal separation of 10 feet and 25 feet, the service line may be laid closer to the storm, sewer/septic provided that:
  - a. The bottom of the water main is at least 18 inches above the top of sewer and a minimum of five feet edge to edge horizontally is provided.
  - b. Where this vertical separation cannot be obtained, the sewer shall be constructed of materials and joints that are equivalent to water main standards of construction and shall be pressure tested to assure water tightness prior to backfilling, further the water line will be required to have secondary protection in the form of sleeving with water tight ends and will extend a minimum of ten feet beyond the area in either direction. Sleeving will consist of a pipe no less than two times the diameter of the water line and be comprised of pipe that meets the same requirements of water line with water tight ends.
  - c. Water lines laid within 25 feet of a septic field will be required to have secondary protection in the form of sleeving and extend outside that area by a minimum of ten feet either direction with water tight ends.

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- d. The NHDES agrees that local conditions warrant less than 10 feet from septic tank/line and or 25 feet from septic field horizontal separation and approves the plans and specifications of the work.

## **Crossings:**

- 1) **Normal conditions-** Water lines crossing over house sewers, storm sewers or sanitary sewers shall be laid to provide a separation of at least 18 inches between the bottom of the water line and top of sewer whenever possible.
- 2) **Unusual conditions-** When local conditions prevent a vertical separation as described in **Parallel installation** the following construction shall be used:
  - a. Sewers passing over or under water mains should be constructed of the materials described with joints that are equivalent to the water main standards of construction and shall be pressure tested to assure water tightness prior to backfilling.
  - b. Water lines passing under sewers shall, in addition, be protected by providing a vertical separation of at least 18 inches between the bottom of the sewer and top of the water line; adequate structural support for the sewers to prevent excessive deflection of joints and settling on and breaking the water lines; and that one full length of water pipe be centered at the point of crossing so that the joints will be equidistant and as far as possible from the sewer. The water line may be required to be sleeved in this application.

## **Trenching and bedding requirements:**

- a. All trenching activities will conform to OSHA approved methods as well as State of N.H. and Town of Rye requirements. The (RWD) holds the right to halt trenching activities if unsafe and/or proper methods are not met.
- b. If excavation is to be performed in a roadway of the Town of Rye or a right of way a **Road Excavation Permit** must be obtained by the contractor/owner from the **Rye Public Works Dept.**, a copy of that permit must be filed with the (RWD) prior to any roadway excavation.
- c. All back filling in a road way and or right of way in the **Town of Rye** will be required to conform to the **Town of Rye's** requirements and will not be a responsibility of the (RWD). Contractor will be held responsible for meeting the Town's requirements, however the (RWD) holds the right to suspend backfilling activities if those requirements are not met.
- d. Bedding material must consist of granular sand substantially free of organic materials, loam, wood, trash, rock, and any other objectionable material.
- e. Bedding depth below service line will be no less than 6 inches, 12 inches from sides, and a minimum of 18 inches from top
- f. Water caution tape will be installed between 18 inches and 24 inches above service line.

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## **Sleeving and Tracer wire:**

### **1) Sleeving**

- a. Sleeving will be required and installed on an as need basis whether for sewer /septic separation purposes and or general service line protection.
- b. Sleeving will be allowed if contractor/owner feels the need for it even if it is not required for sewer/septic purposes.
- c. Sleeving will consist of piping at least two times the diameter of the service line, pipe shall meet water line specification requirements, and have water tight sealable ends.
- d. Copper tubing shall not be sleeved unless approved by the (RWD)
- e. When sleeving is utilized a tracer wire will be required for line location purposes

## **Tracer wire:**

- a. A tracer wire must be installed with the utilization of sleeving and or plastic line installation. The tracer wire will consist of a continuous (when possible) 12 gauge wire accessible at either end of the service line and marked for identification where applicable.
- b. When tracer wire is required for the service line from water main to curb stop the wire will be affixed to the corporation valve.

## **Internal Requirements:**

- a. The standard form of entry will be thru wall. Thru floor entry of service line will require pre – approval from the (RWD).
- b. The service line will be encased in a sleeve where it passes through foundation wall and or floor. The sleeve will be a minimum size of two times the service line size with water tight sealable ends. The sleeve will extend no less than 24 inches outside of foundation wall or floor and no less than 6 inches from the interior wall.
- c. Alternative to a sleeve is a sealable ring that the outer diameter is a minimum of two times the service line and the inner part of ring seals against the service line. **(linkseal)**
- d. The service line will extend a minimum of 12 inches from foundation wall or from floor.
- e. Service line will be no less than twelve inches from floor and no more than 36 inches from floor.
- f. Service line must maintain a minimum of 12 inches from an adjacent wall.
- g. A 36 inch perimeter must be maintain from other obstructions.
- h. The (RWD) requires that the meter be installed in a warm dry accessible location and be easily accessible from point of entry of building to meter location. No meter will be allowed to be installed in a location and or a path of entry to meter that is consider a confined space.
- i. **Confined space** will be considered any location and or path of entry that is less than 48 inches high and 36 inches wide. Location must have two points of entry with openings no less than 36 inches high and 36 inches wide.
- j. No meter and or shutoff valve will be installed in a wall or under floor without approval from the (RWD).

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- k. No shutoff valve will be installed more than 18 inches from point of entry of service line, meter and backflow device will be installed at the shutoff valve location, unless otherwise approved by the (RWD).
- l. Shutoff valve will be of ball type, with a ¼ turn from off to on positions, no screw gate style valve will be permitted, unless approved by the (RWD).
- m. When service line is of copper type; bonding on both sides of the meter, and bonded together shall be required.
- n. Owner/contractor is responsible for installation of an 18-3 gauge copper wire for the purpose of meter reading from the meter location to an approved outside location of building, when not possible the owner will be responsible for the purchase of a radio reading device upon the approval of the (RWD).
- o. When any of the requirements set forth in **Internal Requirements** cannot be met the (RWD) reserves the right to deny service to premise as well as revoke service from existing service.

## Material Requirements:

### a. Copper Tubing:

- 1- Copper tube shall be 1 inch (unless otherwise required) soft temper, type K conforming to ASTM B-88.

### b. Plastic Pipe:

- 1- Shall be of copper tube size **(CTS)** with a minimum pressure rating of 250 psi.
- 2- Stainless steel inserts will be used at connection points for the use of compression type fittings.
- 3- Fittings to be used with **(CTS)** pipe will be of compression type for **(CTS) O.D.** No barb fit and or hose clamps shall be allowed.

### c. Corporate Stops:

- 1- Corporate stops shall be 1 inch (unless otherwise required) ball type compression, lead free. No stop and waste-draining style valve is allowed. **Inlet: AWWA taper CC thread; OUTLET: Conductive compression connection for (CTS) O.D.**

### d. Curb Stops:

- 1- Curb stops shall be 1 inch (unless otherwise required) ball type compression conductive compression connections for **(CTS) O.D.** both ends.

## Curb Boxes and Rods:

- a. Curb boxes for 2 inch and smaller shall have a one-piece cast or ductile iron arch base, a steel pipe extension upper section, cast iron lid and brass thread bronze plug with pentagon nut (rope thread). A stationary 5/8 inch minimum diameter by 24-30 inch minimum **stainless steel** long rod shall be installed in each box. Connection between rod and curb stop shall be made with a stainless steel cotter pin off appropriate size.
- b. Curb boxes shall be set plumb and flush with finish grade. In addition, no obstruction shall be placed to obstruct use of shut off valve wrench within a 6 foot circumference from center of box.

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**Agreement:**

The applicant/s agrees to hold the Rye Water District harmless from any and all damages or claims by reason of negligence or mission on the part of such a person, firm or corporation in the performance of their work, the same to include, but not be limited to, careless guarding of installations and or excavations, failure to restore all properties to conditions as they were prior to the work, any damages growing out of the negligence or carelessness of such person, firm or corporation. Further, the applicant agrees to warrant the work restoration for a period of one year from date of completion. The applicant also upon signing is stating that they are fully knowledgeable and understanding of requirements set forth in this document, failure to comply with any and all requirements set forth by the (RWD) will result in termination of service and or denial of service application.

**Owner:**

\_\_\_\_\_ Printed \_\_\_\_\_ Date \_\_\_\_\_

**Contractor:**

\_\_\_\_\_ Printed \_\_\_\_\_ Date \_\_\_\_\_

**RWD Superintendent/Agent:**

\_\_\_\_\_ Printed \_\_\_\_\_ Date \_\_\_\_\_

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