



# APPLICATION FOR WATER SERVICE CONNECTION

TO THE RIDGEWOOD WATER SYSTEM

(including Temporary Water Service and Reconnections of Water Service)

May 2009

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### Attachments

Agreement Forms (one each for Domestic Services and Fire Services)

Supplemental Attachments not provided in paper copies unless requested

Technical Specifications

prepared by  
Ridgewood Water

This package includes information associated with the review and approval, installation, testing, and acceptance of water service connections to the Ridgewood Water System (including Temporary Service and Reconnections of Service). Refer to the specifications for details on these procedures. This summary is provided for the convenience of the Property Owner and does not supercede the full document. It is conceivable for this process to be accomplished within several days from the connection request to the initiation of water service.

## SUMMARY

**General Responsibilities** - Ridgewood Water makes all connections to its system piping and installs the service line from the main to the curb stop, sets the curb box, and performs the meter installation work. The Property Owner (Customer; their plumber, contractor, representative, etc.) is responsible for all excavations, roadway permits, traffic control, foundation penetrations and restorations, materials, installation of the service line from the curb stop/isolation valve to the meter location, and surface restorations. Fees are charged for various aspects of this work (see section below).

**Overall Schedule for Installing a Connection to the System** - The following are the major milestones and events toward making a connection to the Ridgewood Water System.

**Request for and Approval of Connection** - Ridgewood Water will review individual requests for connection and provide approval once the required conditions are met (i.e. a water main exists at the property). Requests need to be accompanied with three copies (electronic preferred) of a plan that shows the proposed route of the service line and major surface and subsurface features and a signed Agreement Form (included herein). Upon approval the installation can be scheduled with Ridgewood Water as time permits.

**Preparation of Excavation, Trench, and Foundation Penetration** - The Property Owner is required to prepare these features (from main to building) prior to the beginning of work.

**Installation and Acceptance of Main to Curb Portion of Service Line** - Ridgewood Water installs this portion of the service line and accepts it upon its successful installation.

**Installation of Curb to Building Portion of Service Line** - The Property Owner places the service piping in the trench and through the foundation penetration and backfills the trench.

**Materials** - The Property Owner provides all piping materials and fittings for all size services with the following exceptions: meter valves (straight or angled) and meter couplings for 3/4" and 1" services. These two items are sold to the Property Owner by Ridgewood Water.

**Meter Installation** - Ridgewood Water installs the meter to the meter valve and connects the meter coupling. The Property Owner then connects the coupling to the building plumbing through a ball valve. Installations larger than 1" require a union.

Testing - Services 4" and larger are pressure and bacteriologically tested prior to initiation of water service.

Initiation of Water Service - Upon payment of outstanding charges and request the connection is opened to the water system.

Fire Service Requirements - Fire Services are required to have a detector check assembly with a metered by-pass.

Requests for Extension of Time for Final Connection - Property Owners have one year from the date of the installation of the Main to Curb portion of the service line, to have the full service installation (Main to Curb and Curb to Building portions and the Meter Installation) completed. Should the Property Owner desire an extension of time past this anniversary date, they may apply for a one year extension. Should no application be received, Ridgewood Water may elect to remove/disconnect/abandon its portion of the service line back to the water main and additional fees may be levied against Property Owners and their successors.

**Fees** - Ridgewood Water charges fees for the connection of water services to its system. These fees are divided into three groups based on size and are as follows:

3/4" and 1"    \$1833            1- 1/2" and 2"    \$1808            4" and larger    \$2938

\$1438 of these fees are to assist in funding past improvements to the water system. The remainder is associated with installation and material costs.

Payment of all fees is due upon completion of the service line installation/inspection and prior to the initiation of water service. Payment shall be coordinated with the field personnel of the Distribution System Maintenance Division.

Temporary Water Service Fees - There is a \$165 Initial Fee and a \$140 Final Fee. Each of these can be reduced by \$90 if coordinated with a disconnection of service, installation of service, and/or a reconnection of service. Relocation of Temporary Water Service is accomplished for a \$140 Relocation Fee.

Reconnection Fees - For 3/4" and 1" services the cost is \$215 and \$140 for all other sizes.

A \$25 extension fee is charged for extending the partial installation of a service line past the anniversary date.

**Contact Information** - Ridgewood Water provides water service to customers in the Village of Ridgewood, the Boroughs of Glen Rock and Midland Park, and the Township of Wyckoff, all in Bergen County, NJ. The main offices (administrative and customer service) of Ridgewood Water are located at 131 North Maple Avenue, Ridgewood, NJ 07451. Distribution System Maintenance (pipelines, valves, hydrants, service lines, and meters), Mapping, and Engineering Divisions are located at 205 East Glen Avenue, Ridgewood. The Operations (pumping, storage, water testing, etc.) Division is located at 399 Godwin Avenue, Midland Park. The following are telephone numbers for the various Divisions:

Main Offices and Director	(201) 670-5521
Distribution System Maintenance	(201) 670-5524
Chief Engineer	(201) 670-5509
Mapping	(201) 670-3372
Operations and 24 hour contact	(201) 670-5526

Questions regarding the material included in this document should be directed to the Chief Engineer or the Distribution System Maintenance Division.

# AGREEMENT

## FOR THE CONNECTION OF DOMESTIC WATER SERVICES TO THE RIDGEWOOD WATER SYSTEM

This Agreement made by and between:

VILLAGE OF RIDGEWOOD

a municipal corporation of the state of New Jersey, having offices at 131 North Maple Avenue, Ridgewood, NJ 07451, hereinafter referred to as the "Village"; and

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[print or type name, address, and contact info. (phone and/or cell number and e-mail address)]

hereinafter referred to as the "Property Owner" for (circle one that applies)

NEW                      TEMPORARY                      RECONNECTION

WITNESSETH:

WHEREAS, the Village owns and operates a public community water supply system, hereinafter referred to as "Ridgewood Water"; and

WHEREAS, the Property Owner needs a service installed at (provide address w/ town)

\_\_\_\_\_ ; and

NOW, THEREFORE, the Participants agree as follows:

1. The Property Owner will follow the guidelines outlined in the package entitled Application for Water Service Connection to the Ridgewood Water System,

dated \_\_\_\_\_ 20\_\_ (of which this Agreement is a part thereof).

\_\_\_\_\_  
Signed and Dated (Property Owner)

\_\_\_\_\_  
Signed and Dated (Ridgewood Water)

# AGREEMENT

## FOR THE CONNECTION OF FIRE SERVICES TO THE RIDGEWOOD WATER SYSTEM

This Agreement made by and between:

VILLAGE OF RIDGEWOOD

a municipal corporation of the state of New Jersey, having offices at 131 North Maple Avenue, Ridgewood, NJ 07451, hereinafter referred to as the "Village"; and

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[print or type name, address, and contact info. (phone and/or cell number and e-mail address)]

hereinafter referred to as the "Property Owner".

WITNESSETH:

WHEREAS, the Village owns and operates a public community water supply system, hereinafter referred to as "Ridgewood Water"; and

WHEREAS, the Property Owner needs a fire service installed at (provide address w/ town)

\_\_\_\_\_ ; and

NOW, THEREFORE, the Participants agree as follows:

1. The Property Owner will follow the guidelines outlined in the package entitled Application for Water Service Connection to the Ridgewood Water System,

dated \_\_\_\_\_ 20\_\_\_\_ (of which this Agreement is a part thereof) and the technical guidelines\* outlined in the separate package entitled Developers' Package for the Installation of Water Facilities within the Ridgewood Water System dated

\_\_\_\_\_ 20\_\_\_\_ (which shall become a part of this Water Service Package through this Agreement).

\_\_\_\_\_  
Signed and Dated (Property Owner)

\_\_\_\_\_  
Signed and Dated (Ridgewood Water)

\* Technical Guidelines include all the guidelines except the Agreement Form and Bonds.



# TECHNICAL SPECIFICATIONS

## FOR THE CONNECTION OF WATER SERVICES

April 2009

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## GENERAL REQUIREMENTS

These technical specifications are a part of an overall package of information for the connection of water services to the Ridgewood Water System.

Submittals: The Property Owner is required to submit information on the materials that are proposed to be installed. 2 sets of information shall be submitted for approval prior to installation. Failure to submit information shall cause Ridgewood Water to reject the work and deny water service.

Copper Tubing, Fittings, and Curb Boxes: For these items the following shall be submitted before delivery:

1. Certification by the manufacturer or supplier that the material furnished for the work meets all pertinent AWWA Standards.
2. Catalog cuts and installation instructions.

Backfilling: Materials samples from each proposed source shall be submitted, for approval, to Ridgewood Water for Broken Stone and Gravel (SECTION 5), Bank-Run-Sand-and-Gravel (SECTION 6), Quarry-Process Stone (SECTION 7), and Sand (SECTION 8). Material samples shall be 30 pound samples.

2 set of submittals shall be sent to the Ridgewood Water Engineer. Each set of submittals shall be in the form of a single bound and catalogued package of all proposed materials. Ridgewood Water may (verbally) waive these requirements if the materials supplied specifically conform to the specifications.

Approvals/Denials: Ridgewood Water will supply the Property Owner with an approval/denial of the information submitted for the proposed materials. It is the responsibility of the Property Owner to provide ample time for review and correspondence regarding submittals. Completeness of the information and adherence of the information to the specifications will greatly aide in obtaining timely approvals. Ridgewood Water reserves the right to request the aforementioned Submittals at any time during the Work, even if a verbal waiver of the requirements was previously supplied.

Materials: All materials proposed for installation shall be new and shall not have been previously installed. Materials required to be dismantled may be required to be removed from the work site and replaced with new materials.

Origin of Manufacture: All materials supplied for installation shall be manufactured and assembled in the United States.

As-Built Drawings: It is the responsibility of the Property Owner to prepare as-built drawings that show the location of all facilities installed. Ridgewood Water may waive this requirement and generate the as-built drawing.

Notification/Scheduling: All scheduling shall be coordinated through the Distribution System Maintenance Division, (201) 670-5524, Monday through Friday, 7:30 am to 4:00 pm. Verbal communication is for the convenience of the Property Owner, any miscommunications shall be the responsibility of the Property Owner.

The Property Owner shall have all excavations and foundation penetrations prepared in



advance. Should a crew show up to a scheduled installation and find that the conditions are not acceptable, then the crew shall leave the site and the Property Owner will have to reschedule the work and be responsible for additional charges.

Excavations and Traffic Control: are the responsibility of and shall be prepared by the Property Owner.

Connection to Existing System: Ridgewood Water shall make all connections to its piping system. Connections shall only be made to piping providing potable water service.

Operation of Facilities: Ridgewood Water will operate all existing facilities (corporation and curb stops and system isolation valves). Property Owners are NOT permitted to operate Ridgewood Water facilities. Corporation and curb stops and system isolation valves between the Property Owners proposed piping and the Ridgewood Water system will be immediately accepted in the field by Ridgewood Water upon the proper installation and inspection by Ridgewood Water. Once accepted these valves shall not be operated by the Property Owner.

Surface Restoration: These specifications do not cover surface restoration, except with regard to curb box locations. Restoration and stabilization of ground surfaces falls underneath other jurisdictions.

Un-Specified Conditions: These specifications are not all encompassing and are meant as a guide for the predominance of situations, items, and conditions (conditions) that should be encountered while installing piping facilities within the Ridgewood Water Service Area.

For conditions that present themselves in the field during the installation of facilities, Ridgewood Water will review these and make a reasonable determination. Determinations shall be made prior to the continuance of the installation work.

For conditions that present themselves prior to construction, the Property Owner shall provide information for review by Ridgewood Water prior to the initiation of any installation work.

The failure of these specifications to cover a condition does not relieve the Property Owner from following the requirements of Ridgewood Water. Lack of planning, understanding of existing conditions, or unforeseen circumstances does not waive the requirements of Ridgewood Water. The determinations of Ridgewood Water on un-specified conditions is final.

END OF SECTION

## **SPECIFIC REQUIREMENTS**

The following requirements layout the specific issues for the connection of water services to the Ridgewood Water system.

### **Requests for and Approval of Connections to the Water System**

Requests for connections to the Ridgewood Water System shall be directed to the Distribution System Maintenance Staff at (201) 670-5524 or in writing to the address above, attention Distribution System Maintenance Division. Requests shall be reviewed within Ridgewood Water and a determination presented back to the party making the request for connection. Depending on the characteristics of the proposed water usage, site conditions, etc.; further information might be required to review the request for connection. This will be handled on a case by case basis. Property Owners are required to present a plan (three copies - electronic preferred) showing the proposed route of the service line along with a completed and signed copy of the Service Connection Agreement Form (included herein). The plan shall include, but not be limited to, such surface and subsurface features as retaining walls and septic tanks that might affect the installation and operation of the service line. Property surveys are an excellent format for presenting this information.

Approvals will typically be verbal and in conjunction with discussions to schedule the installation, but can be presented in writing upon request.

### **Types of Water Service**

Ridgewood Water has two basic types of water service, domestic and fire service. Domestic service includes all metered water usage. Domestic service bills are comprised of two components - cost per volume of water used and a service charge based on the size of the meter. The volume of water is billed at a flat rate per 1000 gallons for all customers (commercial, residential, institutional, etc.). The service charge is billed quarterly and varies based on meter size.

Fire services are not metered and are billed for at a flat rate, regardless of size. Metered by-passes are required and are billed in the same manner as domestic services. However, usage (save testing and emergency flows) are prohibited and trigger enforcement actions.

Property Owners can request Temporary Water Service (typically for construction purposes) off existing service lines that have been temporarily disconnected from normal water service. The requirements for this type of service shall generally follow those for Domestic Water Service, as discussed elsewhere in this document.

### **Water System Requirements for Water Services**

Connection to the water system typically requires that a water main exist in the public

right of way in front of the property and that the main stretches across the entire frontage (or side) of that property. As Ridgewood Water services customers in several different pressure zones, the main in front of the property has to be associated with the appropriate zone.

If no main exists or if the existing main is not associated with the appropriate zone, then a water main extension might be required to bring water service across the property frontage. Refer to the separate document, Developers' Package for the Installation of Water Facilities within the Ridgewood Water System.

Similarly, there may be issues with the available volume/residual pressure of water required for the proposed service and the size and strength of the existing distribution system. For this condition and others, there might be requirements on the Property Owner requesting the connection to reinforce the existing distribution, supply, and/or storage facilities.

### **Installation Requirements for Water Services**

#### **DOMESTIC SERVICE LINES - 3/4" through 2"**

General - Domestic Service Lines shall be installed off water mains owned and Operated by Ridgewood Water that are currently providing potable water service.

Domestic Service Lines are comprised of the following components:

The Corporation Stop is a valve connection to the water system piping.

The Service Piping is the pipe that conveys the water from the main to the point of use (typically a building). This line is buried four feet below the ground surface to protect it from freezing.

The Curb Stop is an isolation valve located along the service line near the curb or sidewalk. For services larger than 2", this will be a gate valve.

The Curb Box is an access tube that allows the curb stop to be turned on and off with a valve key without excavating down to the stop.

These components make up the following two of the three major parts of a domestic service line:

The Main to Curb is the portion of the service line from the corporation stop tapped in the main in the street to and including the curb stop and box.

The Curb to Building is the remaining portion of the service line.

The third part is the meter installation, which is described below under Installation Procedures.

Size of Domestic Service Line - In most cases for residential and small commercial properties a 3/4" or a 1" domestic service line will be sufficient, although 1-1/2" and 2"

sizes are also available. Property Owners should consult with a professional to determine their flow requirements and therefore the size of the domestic service line to be installed. Ridgewood Water is available to provide a recommendation of the sizing of a domestic service line, but is not responsible for sizing the domestic service line. The ultimate decision as to the size of the service line to be installed is that of the Property Owner.

Ownership - The main to curb portion of the service line shall become the property of Ridgewood Water. As stated below, this will occur in the field upon successful installation. The curb to building portion of the service line shall be owned by and be the responsibility of the Property Owner who shall be responsible for maintenance/repair thereof. Ridgewood Water is required to be informed when maintenance/repair work will be performed on the curb to building portion of the service line, so that inspections of the work can be accomplished

Excavations shall be prepared by the Property Owner and shall be of sufficient width and depth to allow the work to be performed in a convenient manner and shall be of the following accord:

General - All excavations prepared by the Property Owner shall be the full responsibility of the Property Owner, including but not limited to shoring, side slopes, ingress and egress, and dewatering. Excavations shall be appropriately prepared in advance of the work and maintained during the course of the work. Should deleterious or substandard conditions exist when Ridgewood Water arrives at the project location or if they are allowed to degrade to such conditions during the course of the work, then Ridgewood Water personnel will leave the site and the work will need to be rescheduled. The Property Owner will be assessed a charge for the additional time spent by the personnel as a result of such conditions. The judgment of Ridgewood Water as to the conditions of the excavations shall be final. In the event that the excavation compromises personnel, equipment, and/or materials; Ridgewood Water might bring in its own equipment to correct the situation, based on the lack of appropriate response by the Property Owner. In such instances the Property Owner will be assessed charges for personnel and equipment to rectify the situation.

For connection to the water main - The excavation shall uncover the existing main for a length of at least three feet, exclusive of bells, joints, fittings, clamps, couplings, etc. The depth of the excavation shall provide for the main being 12" to 36" above the base of the excavation. The excavation shall provide for a minimum of one foot of clearance behind the main and at least five feet in front of the main, at the base of the excavation. The base of the excavation shall be level, dry, and stable. As conditions exist, the Property Owner may be required to dewater the excavation and bed the same with stone to provide a stable condition.

For trenching from the main connection to the building - The trench shall be a minimum of 30" in width at the base and 4'-3" in depth, free from large stones and boulders in the bottom and sides, and generally follow the same requirements for excavations. The line of the trench shall generally be straight with sweeping

bends where required. Tight bends shall cause the trench to fail inspection prior to installing the service line. Coordination with Ridgewood Water prior to/during the excavation of the trench shall facilitate proper installations.

Clearances and Conflicts - The connection excavation and the service line trench shall be placed and routed to avoid conflicts with other utilities, structures, and conditions that will compromise the integrity of the service line installation. Ridgewood Water may direct the excavation/trench to be expanded to provide for adequate clearances. In general, service lines shall not be routed within 18" of other utilities or structures.

Traffic Control in the public right of way is the full responsibility of the Property Owner. Similar judgements and actions will be made/taken with regard to traffic control as with excavations to ensure the safety of personnel, equipment, and materials.

Sleeved Foundation/Floor Penetrations are required where service lines will enter a building and are the responsibility of the Property Owner to construct/prepare. The sleeved penetration shall have a diameter of 1½" for a ¾" service line and proportionally larger diameters for larger service lines. Sleeves shall have no bends or fittings (unless approved by Ridgewood Water).

Installation Procedures - Domestic service lines shall be installed in accordance with Ridgewood Water's standards and requirements (also see attached material specifications) and will generally follow the steps outlined below:

Ridgewood Water will make the connection to the water system piping in the excavation prepared by the Property Owner. The corporation stop will be supplied by the Property Owner and accepted by Ridgewood Water upon its successful connection to the system. The main to curb portion of the service piping and the curb stop and box shall be supplied by the Property Owner and installed by Ridgewood Water. The curb stop will then be shut. Successful operation of this portion of the service line and closure of the curb stop will transfer the ownership of this portion of the main to curb portion of the service line to Ridgewood Water.

The Property Owner is responsible for the backfilling and surface restoration of the excavation (see Backfilling, below). Ridgewood Water will set the curb box in conjunction with the backfilling of the excavation. This will be accomplished immediately following the installation and flushing of the main to curb.

Prior to the installation of the curb to building portion of the service line, the Property Owner shall place 3" of quarry-processed stone or sand in the base of the trench for its entire length and width, bringing its depth to 4' -0". Ridgewood Water will then make the connection of the service line piping to the curb stop on the building side of the curb stop. The Property Owner will then advance the piping toward the building an appropriate enough distance to allow the curb box to be backfilled.

The Property Owner will install the curb to building portion of the service piping in the trench and through a sleeved hole in the foundation/floor, both prepared by

the Property Owner. Once connected, the service piping will then be flushed with water from the water system. The Property Owner is responsible for the collection and disposal of all flush water. The curb to building portion of a service line has to be routed clear of other utilities and facilities (e.g. a service line can not go over top of a septic system or below a garage floor). Field conditions will be reviewed prior to the time of installation to determine the location of any conflicts and to determine the proposed route.

The Property Owner is responsible for the backfilling and surface restoration of the trench (see Backfilling, below). Ridgewood Water will inspect the backfilling of the trench, which shall occur immediately after laying the piping. Property Owners are cautioned to coordinate with Code Officials for necessary inspections.

Meter Installations (meter, meter valve just prior to the meter, meter coupling just after the meter, and isolation valve just after the coupling) shall be set after the service line is advanced into the building. Meters shall be located in a space within the structure that is protected from damage and accessible by Ridgewood Water personnel. Meter installations located in crawl spaces, garages, porches, closets (i.e. other than a unfinished portion of a basement) are discouraged and require preapproval from Ridgewood Water.

Ridgewood Water will supply the water meter and the Property Owner is required to supply the valves and meter coupling to connect the service line, through the meter installation, to the household piping. For convenience, Property Owners can purchase the meter valve and meter coupling, at cost, from Ridgewood Water for 3/4" and 1" installations.

For installations greater than 1", Property Owners are required to install and maintain a working union after the meter (and before the isolation valve) which shall be located to facilitate future meter removals and installations.

The curb stop will be opened upon setting of the meter installation, payment of any delinquent charges, and authorization from the Property Owner. Upon opening the curb stop, water service will formally have been initiated.

Meter Pits are periodically required in lieu of a meter installation within a building. In these instances the meter pit is located nearby and after the curb stop. Meter pit installations shall be coordinated on a case by case basis.

#### DOMESTIC SERVICE LINES - 4" and Larger

Domestic service lines 4" and larger will be coordinated on a case by case basis, but in general, will follow the procedures for fire service lines.

#### FIRE SERVICE LINES

General - Fire Service Lines shall be installed off water mains owned and operated by

Ridgewood Water that are currently providing potable water service. Fire Service Lines are comprised of the following components:

The System Isolation Valve is the valve connection to the system piping and will typically be a tapping sleeve and valve and a valve box assembly.

Fire Service Piping is the piping that conveys the water from the system piping to the building.

Building Valve is an isolation valve located on the property, just outside of the building and includes a valve box assembly.

Size of Fire Service Line - Property Owners should consult with a professional to determine their flow requirements and therefore the size of fire service line to be installed.

Ownership - The system isolation valve shall become the property of Ridgewood Water. As stated below, this will occur in the field upon successful installation. The remainder of the fire service line shall be owned by and be the responsibility of the Property Owner.

Backflow Prevention - The Property Owner shall conform to all applicable laws and requirements and shall install and maintain the appropriate facilities regarding backflow prevention. At a minimum, Ridgewood Water requires that a Detector Check assembly be installed with a metered by-pass.

Installation Procedures - Fire service lines shall be installed in accordance with Ridgewood Water's standards and requirements (refer to the guidelines and specifications located in the separate document Developers' Package for the Installation of Water Facilities within the Ridgewood Water System, which are made a part of this Package/Agreement) and will generally follow the steps outlined below:

Ridgewood Water will make the connection to the water system piping in the excavation prepared by the Property Owner. The system isolation valve will be supplied by the Property Owner and accepted upon its successful connection to the system.

The Property Owner is required to install the fire service piping and the building valve. Inspection thereof shall be coordinated with Ridgewood Water up to and including the point of entry into the building. Once the Property Owner has installed the backflow prevention device, Ridgewood Water will install the meter on the bypass.

It is the responsibility of the Property Owner to coordinate flushing, disinfection, and pressure and bacteriological testing of the fire service line up to and including the first isolation valve (shut off) in the building. Sample bottles can be obtained from Ridgewood Water and Ridgewood Water will perform the bacteriological testing. Ridgewood Water will provide water for initial filling and initial flushing of the disinfectant and the proposed facilities via the connection to the system. The Property Owner is responsible for the collection and disposal of all flush water.

The fire service piping has to be routed clear of certain utilities/facilities (e.g. sewer line and septic facilities). Field conditions will be reviewed prior to the time of installation to determine the location of any conflicts and to determine the proposed route.

Additional valves along the length of the fire service might be recommended or required as conditions dictate.

Upon successful inspection and testing (both pressure and bacterial) of the fire service piping, building valve, and backflow prevention devices and payment of any delinquent charges, Ridgewood Water will open the system isolation valve and initiate service to the fire service line at the specific written direction of the Property Owner.

Operational Responsibilities - Property Owners shall not utilize Fire Services as sources of domestic water supply. They are for the sole purpose of supplying water for emergency fire suppression purposes and for the periodic testing/maintaining such systems. Illegal usage of water through a Fire Service Connection shall result in legal actions against the Property Owner.

#### TEMPORARY WATER SERVICE and RECONNECTION of WATER SERVICE

Property Owners can request Temporary Water Service on temporarily disconnected water services or on new service lines. Typically, an existing water service line is disconnected on the property and the Property Owner coordinates for Temporary Water Service. Ridgewood Water provides 3/4" meter connections (at cost) and the Property Owner installs the coupling prior to the meter. The piping prior to the meter is required to be 3/4" copper tubing. Should other piping materials and/or sizes exist, then the Property Owner is obligated to transition the piping. Ridgewood Water will install the meter and coupling and the Property Owner will provide for a shut of valve and protection of the meter from vandalism, theft, and the weather. Temporary Water Service is billed the same as normal domestic water service, except that the quarterly usage is estimated.

Temporary Water Service can be relocated from one portion of the site (a temporary enclosure in the yard) to the final location (in the basement).

Temporarily disconnected water services shall be reconnected under the requirements of this package.

#### BACKFILLING

General: These specifications apply to the backfilling of Domestic Service Lines. Refer to the guidelines and specifications located in the separate document Developers' Package for the Installation of Water Facilities within the Ridgewood Water System, (which are made apart of this Package/Agreement) for the backfilling of Fire Service Lines.



Selection of materials to be used for backfill in various locations shall be as directed by Ridgewood Water. In general, select material shall be placed under and around the piping and above this, material excavated from the connection excavation and/or trench, if suitable, can be placed back into the excavation and/or trench as backfill. In cases where this material is not suitable, bank-run-sand-and-gravel shall be imported for fill. Bank-run-sand-and-gravel is specified elsewhere in these specifications.

All lumber, rubbish, and braces shall be carefully removed from the excavation unless ordered left in place by Ridgewood Water.

Connection Excavations shall be typically be backfilled with quarry-processed stone to a cover of at least 12" over the top of the water main, which shall be placed by a combination of machine and hand in 6" layers, each layer to be thoroughly compacted to 95% of maximum dry density by mechanical tampers of an approved type. Puddling of trenches as a method of compaction is not acceptable to Ridgewood Water. Backfill shall not be allowed to drop from a height of more than 2' until a cover of 6" is obtained over the top of the pipe. In certain circumstances, Ridgewood Water might direct the excavation to be bedded with broken stone gravel up to the springline of the pipe in lieu of the quarry-processed stone and/or require additional excavation to remove unsuitable material from the bottom of the excavation.

The backfilling shall be done as completely as possible in such manner as to prevent after-settlement around the water main. No stones or boulders shall be allowed to drop into the excavation. No stones, boulders, concrete, asphalt, etc. in excess of 6" shall be placed in the excavation below the level of 18" above the top of the pipe. The excavation shall be wet down as required to obtain optimum density while the backfilling is being carried out. Adequate support of other utilities shall be required where necessary to prevent settlement thereof and possible conflicts with the service line and/or water main.

Backfill between a plane 18" above the top of the pipe and the finished surface grade shall be as required by the governing body, authority, and/or property owner. Ridgewood Water only requires that no stones, boulders, concrete, etc. in excess of 6" and no pieces of asphalt be placed in the trench above this point as backfill.

Backfilling of the service line portion of the connection excavation and service line trench shall be accomplished in similar manner as dictated above with the following additional stipulations:

The main to curb portion of the service line shall be bedded with a minimum of 6" of quarry-processed stone when the excavation is required to be bedded with broken stone gravel.

Compaction of the material above the service line shall occur only after 18" of cover has been placed over the service line.

The curb box shall be backfilled to within 6" of finished grade with quarry-processed stone, which shall form a minimum of a 24" diameter cell around the box. The box shall be set perpendicular, with compaction as described above to prevent the sideways settlement thereof.

Ridgewood Water may perform in-place density testing on any or all lifts of the backfill during the backfilling operation. The Property Owner shall provide safe access to the trench for Ridgewood Water for such testing. If the testing indicates less than the specified density, the Property Owner shall re-compact the material until the specified density is achieved.

Service Line Trenches shall be backfilled in similar accord to Connection Excavations (specified above) with the following specific stipulations:

The trench shall be bedded with a minimum of 3” of quarry-processed stone or sand.

The trench shall be backfilled with a minimum of 12” of quarry-processed stone after placement of the service line piping.

**Scheduling and Inspections**

The Property Owner has the responsibility to schedule installations of service lines. Ridgewood Water will assign personnel to a proposed installation based on their availability and its workload. If Ridgewood Water personnel are available and approval has been obtained for the connection, a domestic service line could conceivably be installed (from the system connection to the meter installation) during a single day. Property Owners are cautioned to coordinate with Code Officials for necessary inspections.

**Fees**

RW charges fees for the connection of water services to its system. These fees are divided into three groups based on size and are as follows:

3/4" and 1"    \$1833            1- 1/2" and 2"    \$1758            4" and larger    \$2938

\$1438 of these fees are to assist in funding past improvements to the water system. The remainder is associated with installation and material costs.

Payment of all fees is due upon completion of the service line installation/inspection and prior to the initiation of water service. Payment shall be coordinated with the field personnel of the Distribution System Maintenance Division.

Temporary Water Service Fees - There is a \$165 Initial Fee and a \$140 Final Fee. Each of these can be reduced by \$90 if coordinated with a disconnection of service, installation of service, and/or a reconnection of service. Relocation of Temporary Water Service is accomplished for a \$140 Relocation Fee.

Reconnection Fees - For 3/4" and 1" services the fee is \$215 and \$140 for all other sizes.

### **Additional Installation Charges**

Additional charges shall be levied against Property Owners for such items as:

The initial visit if a return visit is required to make the connection to the system, to place the service line, and/or for the meter installation. The excavations and sleeved holes shall be appropriately prepared and approved materials shall be available to perform the work - if these are deemed to not be acceptable, Ridgewood Water personnel shall leave the site. The Property Owner will have to reschedule these personnel for a return visit. Charges will be presented based on the time spent to coordinate the initial field visit and the hourly rate for the personnel.

Equipment brought to the site by Ridgewood Water and personnel time to rectify conditions that potentially harm its personnel, materials, equipment associated with excavations and/or traffic conditions that are the responsibility of the Property Owner.

Water associated with additional fillings and flushings of larger fire services, which will be obtained at a cost for the water at the going rate per gallon and a cost per hour or portion thereof for the operation of the existing facilities to provide water and oversight of the testing.

Additional water samples and testing (beyond the initial sampling and testing) at a charge per sample.

### **Additional Piping and Valve Responsibilities of the Property Owner**

Property Owners are required to maintain a working isolation valve on each side of the water meter (meter valve before and ball after). For installations larger than 1", the Property Owner is required to maintain a union after the meter and before the isolation valve. Metered by-passes shall not have valves on the by-pass, isolation valves shall be located before and after the backflow device. Fire Service piping shall not have test ports or connections for water usage without the approval of Ridgewood Water.

### **Curb and Valve Box Maintenance**

Property Owners and their successors are responsible for the proper maintenance of the curb box or valve box, as applicable, for a period of one year from the time of initiation of the water service. Ridgewood Water will perform an inspection on or about the anniversary date and any problems will be brought to the attention of the Property Owner. These shall be rectified in a timely manner by the Property Owner. Should Ridgewood Water be required to rectify them, the Property Owner hereby agrees to pay the fees presented by Ridgewood Water for such services.

END OF SECTION

**SECTION 1**  
**SERVICE LINE PIPING AND FITTINGS.**  
**BALL VALVES, AND CURB BOXES**  
**3/4" and 1"**

1.01 MATERIALS

Service Line Piping shall be copper tubing complying with AWWA specifications, type "K", and packed in flat coils. Copper tubing (Alloy C 12200) shall be certified by NSF to ANSI/NSF Standard 61 for public water supplies. The copper tubing shall be of U.S. manufacture.

Copper Tubing shall be available at the site in its original packaging and in complete 100' rolls. Partial rolls and packages that are open shall be rejected by Ridgewood Water and unacceptable for usage as service line piping.

Service Line Fittings (corporation stop, curb stop, union, angled or straight meter valve, and straight meter coupling, etc.) shall be as manufactured by Mueller Company or approved equal based on the following schedule:

Corporation Stop shall be a Mueller 300 Ball Corporation Valve with compression fitting outlet, No. B-25008.

Curb Stop shall be a Mueller Mark II Oriseal Curb Valve with compression fitting inlet and outlet, No. H15209.

Unions shall be a Mueller Service Fitting with compression fittings, No. H-15403.

Angled or Straight Meter Valve shall be a **Mueller 300 Ball Angle (or Straight) Meter Valve** with compression fitting inlet by meter swivel nut outlet (drilled for wire seal), quarter turn check, and lock wing, **No. B-24258** (angled) or **No. B-24350** (straight).

Straight Meter Coupling shall be a **Mueller Straight Meter Coupling** with meter swivel nut inlet (drilled for wire seal) and NPT (iron pipe thread) outlet, **No. H-10896**.

Service line fittings shall all be manufactured by the same manufacturer and conform to ANSI/AWWA C-800. Any additional service line fittings shall also comply with the general requirements presented above or Ridgewood Water's standard.

For temporary water service (a.k.a. construction water) installations, the meter shall be connected to 3/4" copper tubing with a 3/4" **Mueller 90° Angle Meter Coupling, H-14206**. Should other piping materials or sizes exist, the Customer shall provide the proper transition couplings and copper tubing. A Straight Meter Coupling shall be used on the Customer side of the meter.

The Customer shall provide a working ball valve after the Straight Meter Coupling.

Curb Boxes shall be a two piece box with the top section (to screw over bottom section) and bottom section and a lid (marked WATER) with pentagon head bolt (for affixing to the top section). Curb Boxes shall be Figure No. 4901/4901-A, Size 94E as manufactured by Bingham Taylor, or approved equal.

Ball Valves (the isolation valve after the meter and straight meter coupling) is recommended be a Watts Regulator Series B-6000 Standard Port Bronze Ball Valve with NPT (iron pipe thread) inlet and outlet; manufactured to MSS-SP-110 and ASTM B-584, B-16, and B-124; bronze body; brass ball; PTFE stem packing; blow-out proof stem; and Uniseal or Durafill seats; or approved equal.

**Bold Items** (essentially any meter nut connection) - To be sold to Customer by RW.

## 1.02 HANDLING AND INSTALLATION

Materials shall be properly protected in their original packaging from the elements prior to presentation to Ridgewood Water for installation. The Property Owner is responsible for any defects in the material up to the time of acceptance. This includes the installation process. Ridgewood Water will inspect the materials prior to installation and will install the materials provided in a workmanship like manner, but the Property Owner is responsible for any defects that present themselves during installation.

END OF SECTION

**SECTION 2**  
**SERVICE LINE PIPING AND FITTINGS.**  
**BALL VALVES, AND CURB BOXES**  
**1- ½" and 2"**

1.01 MATERIALS

The Property Owner shall supply all materials for 1-½" and 2" services.

Service Line Piping shall be copper tubing complying with AWWA specifications, type "K", and packed in flat coils. Copper tubing (Alloy C 12200) shall be certified by NSF to ANSI/NSF Standard 61 for public water supplies. The copper tubing shall be of U.S. manufacture.

Copper Tubing shall be available at the site in its original packaging and in complete 100' rolls. Partial rolls and packages that are open shall be rejected by Ridgewood Water and unacceptable for usage as service line piping.

Service Line Fittings (corporation stop, curb stop, union, angled or straight meter valve, and straight meter coupling, etc.) shall be as manufactured by Mueller Company or approved equal based on the following schedule:

Service Saddle shall be a Mueller DR2A series double strap service saddle or approved equal.

Corporation Stop shall be a Mueller 300 Ball Corporation Valve with compression fitting outlet, No. B-25008.

Curb Stop shall be a Mueller Mark II Oriseal Curb Valve with compression fitting inlet and outlet, No. H15209.

Unions shall be a Mueller Service Fitting with compression fittings, No. H-15403.

Angled or Straight Meter Valve shall be a Mueller 300 Ball Angle (or Straight) Meter Valve with compression fitting inlet by meter flange outlet, No. B-24276 (angled) or No. B-24335 (straight).

Meter Coupling shall be a Mueller Meter Coupling, No. H-10129 or approved equal.

Service line fittings shall all be manufactured by the same manufacturer and conform to ANSI/AWWA C-800. Any additional service line fittings shall also comply with the general requirements presented above or Ridgewood Water's standard.

For temporary water service (a.k.a. construction water) installations, the meter shall be connected to 3/4" copper tubing with a 3/4" Mueller 90° Angle Meter Coupling, H-14206. Should other piping materials or sizes exist, the Customer shall provide the proper transition couplings and copper tubing. A Straight Meter Coupling shall be used on the Customer side of the meter.

The Customer shall provide a working ball valve after the Meter Coupling.

Curb Boxes shall be a two piece (valve) box with the top section (to screw over bottom section) and bottom section (with arch) and a lid (marked WATER). Boxes shall be Figure No. 4905, Size 22 as manufactured by Bingham Taylor, or approved equal.

Ball Valves (the isolation valve after the meter and straight meter coupling) is recommended be a Watts Regulator Series B-6000 Standard Port Bronze Ball Valve with NPT (iron pipe thread) inlet and outlet; manufactured to MSS-SP-110 and ASTM B-584, B-16, and B-124; bronze body; brass ball; PTFE stem packing; blow-out proof stem; and Uniseal or Durafill seats; or approved equal.

## 1.02 HANDLING AND INSTALLATION

Materials shall be properly protected in their original packaging from the elements prior to presentation to Ridgewood Water for installation. The Property Owner is responsible for any defects in the material up to the time of acceptance. This includes the installation process. Ridgewood Water will inspect the materials prior to installation and will install the materials provided in a workmanship like manner, but the Property Owner is responsible for any defects that present themselves during installation.

Property Owners are required to install and maintain a working union after the meter (and before the aforementioned ball valve) which shall be located to facilitate future meter removals and installations.

END OF SECTION

**SECTION 3**  
**BACKFLOW PREVENTION DEVICES**

1.01 REQUIREMENTS OF OTHER AGENCIES

Backflow Prevention Devices shall comply with the applicable laws and requirements of the appropriate agencies. At a minimum, Ridgewood Water requires a Detector Double Check Valve Detector Assembly with a metered by-pass assembly as specified herein. Should other agencies supercede the requirements of Ridgewood Water, the Property Owner shall provide Ridgewood Water with the appropriate back-up information and a submittal of the proposed Backflow Prevention Device.

1.02 MATERIALS

Backflow Prevention Devices shall be manufactured by Ames Fire and Waterworks, a Division of Watts Regulator Co., or approved equal. They shall be supplied with 3/4" Metered By-Passes which shall:

- include isolation valves on each side of the meter;
- be piped to allow for the installation of a 5/8" x 3/4" water meter (supplied and installed by Ridgewood Water), and
- include a 3/4" Ames 2000B Double Check Valve.

The meter installation shall be accomplished with Meter Couplings (similar to Mueller Co. Straight Meter Couplings, No. H-10896) that facilitate the installation and removal of the meter without disassembling any of the remaining by-pass piping.

For 1-½" & 2" Piping the Backflow Prevention Device shall be an Ames Series 2000B Double Check Valve Assembly.

For 4" through 10" Piping the Backflow Prevention Device shall be an Ames Series C300 Double Check Detector Assembly.

1.03 INSTALLATION AND MAINTENANCE OF VALVES

Property Owners are required to install and maintain working valves before and after the meter to facilitate future meter removals and installations. All isolation valves on the by-pass and associated with future testing of the Backflow Prevention Device shall have a hole drilled in the handle to facilitate the installation of a wire seal (by Ridgewood Water) to ensure that the valves remain in the open position. Valves on piping/stubs that require no flow under normal conditions shall be plugged to create the no flow condition. Ridgewood Water shall be contacted to remove and reinstall such seals in the future.



**SECTION 5**  
**BROKEN STONE OR GRAVEL**

5.01 MATERIALS

Broken stone or gravel shall be clean, hard aggregate, conforming to NJDOT Standard Specifications for NO. 57 stone. A 30 pound sample for each proposed source shall be submitted to Ridgewood Water for approval before any material is trucked to the site.

Should differences of opinions arise in the field between the Developer and Ridgewood Water, Ridgewood Water reserves the right to have a certified testing laboratory perform sieve analyses on the material. Cost of said testing shall be borne by the Developer and levied against the final acceptance of the work.

Broken stone or gravel shall conform to the following gradation:

<u>U.S. Standard Sieve Size</u>	<u>Percent Finer By Weight</u>
1½"	100%
1"	95 - 100%
½"	25 - 60%
No. 4	0 - 10%
No. 5	0 - 5%

END OF SECTION

**SECTION 6**  
**BANK-RUN-SAND-AND-GRAVEL BACKFILL**

6.01 MATERIALS

Bank-run-sand-and-gravel shall be bank run supply, free of clay and foreign material, as approved by Ridgewood Water. A 30-pound sample for each proposed source shall be submitted to Ridgewood Water for approval before any material is trucked to the site.

Should differences of opinions arise in the field between the Developer and Ridgewood Water, Ridgewood Water reserves the right to have a certified testing laboratory perform sieve analyses on the material. Cost of said testing shall be borne by the Developer and levied against the final acceptance of the work.

Bank-run-sand-and-gravel shall meet the following gradation:

<u>U.S. Standard Sieve Size</u>	<u>Percentage by Weight Passing Square Mesh Sieves</u>
1"	100%
3/8"	65 - 100%
No. 10	40 - 85%
No. 30	20 - 65%
No. 60	10 - 45%
No. 200	5 - 12%

END OF SECTION

**SECTION 7**  
**QUARRY-PROCESSED STONE**

**7.01 MATERIALS**

Quarry-processed stone shall be a broken stone material conforming to the requirements for dense graded aggregate material as outlined in the New Jersey State Department of Transportation Standard Specifications. This material shall be hard, durable, broken gravel so that it can be compacted into a hard dense mass. A 30 pound sample for each proposed source shall be submitted to Ridgewood Water for approval before any material is trucked onto the site.

Should differences of opinions arise in the field between the Developer and Ridgewood Water, Ridgewood Water reserves the right to have a certified testing laboratory perform sieve analyses on the material. Cost of said testing shall be borne by the Developer and levied against the final acceptance of the work.

Quarry-processed stone shall have the following gradation:

<u>U.S. Standard Sieve Size</u>	<u>Percentage by Weight Passing Square Mesh Sieves</u>
1½"	100%
¾"	55 - 90%
No. 4	25 - 60%
No. 50	5 - 25%
No. 200	3 - 12%

Dense graded aggregate materials other than quarry-processed stone shall not be used in lieu of quarry-processed stone. Recycled concrete will not be acceptable.

END OF SECTION

**SECTION 8**  
**SAND**

8.01 MATERIALS

Sand shall be clean, siliceous sand, having no more than 3% by weight of foreign matter such as loam, clay, dirt, organic matter, or other impurities. A 30 pound sample for each proposed source shall be submitted to Ridgewood Water for approval before any material is trucked to the site.

Should differences of opinions arise in the field between the Developer and Ridgewood Water, Ridgewood Water reserves the right to have a certified testing laboratory perform sieve analyses on the material. Cost of said testing shall be borne by the Developer and levied against the final acceptance of the work.

Sand shall conform to the following gradation:

<u>US. Standard Sieve Size</u>	<u>Percent Finer By Weight</u>
3/8"	100%
No. 4	95 - 100%
No. 8	80 - 100%
No. 16	50 - 85%
No. 30	25 - 60%
No. 50	10 - 30%
No. 100	2 - 10%
Weight Removed by Decantation	less than 3

The decantation test shall be made in accordance with "Standard Test Method for Materials Finer Than 75 um (No. 200) Sieve in Mineral Aggregate by Washing", ASTM designation: C 117-84.

END OF SECTION