

**AQUA PENNSYLVANIA, INC.**  
**BUILDER'S EXTENSION AGREEMENT**

**This Agreement incorporates and is made up of the documents referenced herein, including:**

**BUILDER'S EXTENSION AGREEMENT**

**EXHIBITS**

1. Requirements for As Built Information
2. Specifications for Builder Extension Pipeline
3. Refund Definitions and Explanation
4. Form for Certification of Final Project Cost

**ATTACHMENTS**

- A. Applications for Domestic & Fire Water Service
- B. Description and Plan of Extension Project
- C. Preliminary Cost Estimate for Extension Project
- D. Commitment and Release of Contractor
- E. Assignment of Contractor's Warranty by Builder
- F. Easements
- G. Permits and Regulatory Approvals
- H. Administrative Fee and Administrative Services
- I. Value Added Fee and Value-Added Services
- J. Performance Bond or Irrevocable Letter of Credit
- K. Insurance

**EXTENSION:**

## **BUILDER'S EXTENSION AGREEMENT**

**THIS BUILDER'S EXTENSION AGREEMENT** is made as of \_\_\_\_\_  
by and between **AQUA PENNSYLVANIA, INC.** ("Aqua") a Pennsylvania Corporation, with  
its principal office at \_\_\_\_\_ and \_\_\_\_\_ a  
Pennsylvania Corporation with its principal office at \_\_\_\_\_ (the  
"Builder").

### **BACKGROUND**

The Builder is the owner and developer, or the authorized representative of the owner or  
developer, of a certain real estate development known as the \_\_\_\_\_ which is  
planned for approximately \_\_\_ residential units, and/or \_\_\_ commercial, industrial or other types  
of unit located in \_\_\_\_\_ Township, \_\_\_\_\_ County, Pennsylvania (the  
"Development").

The Builder wishes to obtain water service from Aqua and Aqua wishes to provide water  
service for the Development.

The Builder wishes to take sole responsibility to furnish and install, at Builder's expense,  
and to contribute to Aqua a water main extension and related improvements for the  
Development.

The Builder represents that \_\_\_\_\_ will be the Contractor for the Extension  
Project under this Agreement (the "Contractor") and the parties acknowledge that the Contractor  
has certain binding obligations under this Agreement that inure to the benefit of Aqua as well as  
the Builder; the Builder is required to have the Contractor execute this Agreement for the  
purpose of having the Contractor acknowledge and agree to the terms and obligations imposed  
on the Contractor by this Agreement.

The Builder has furnished a completed Attachment Package for Builder's Extension  
Agreement (the "Package"). The information contained in the Package, all Attachments referred  
to in the Package, the final, executed documents for which forms are set forth in the  
Attachments, and all Exhibits to the Agreement, are incorporated into this Agreement.

In consideration of the mutual covenants contained in this Agreement, and intending to  
be legally bound, the parties agree as follows:

**A. OBLIGATIONS REGARDING THE MAIN EXTENSION**

- 1. Construction.** The Builder agrees and undertakes as its sole responsibility to design, furnish and install, at Builder's sole expense and in accordance with the terms and conditions of this Agreement, a water main extension and all related improvements for the Development, including, but not limited to, the water main, gate valves, valve boxes, manholes and covers, corporation stops, fire hydrants, curb stops, curb boxes and service lines from the water main to the curb stops, and any restoration work, as further described in Attachment B to this Agreement (the "Extension Project"). The Builder is responsible for supplying all necessary materials and performing the installation.
- 2. Commencement of Construction.** Builder may give notice of intention to commence construction on or after the execution of this Agreement by Aqua and may commence construction not less than two (2) weeks after providing written notice.
- 3. Contractor.**

  - (a) Qualifications.** Aqua acknowledges that the Builder plans to have the work on the Extension Project performed by a Contractor. The Builder will cause the Contractor to perform the work on the Extension Project in accordance with this Agreement. The Contractor must be on the current list of contractors, which Aqua has pre-qualified as having sufficient experience, installing water pipelines and systems. Builder must notify Aqua of any change of Contractor, and any new Contractor must comply with all terms and obligations of this Agreement which apply to the Contractor, including without limitation this Section 3 and the insurance and indemnification provisions. No subcontracting by the Contractor is permitted.
  - (b) Responsibility.** Builder and the Contractor will be liable on a joint and severable basis to Aqua for failure to perform the Extension Project in compliance with this Agreement. The Builder will cause a copy of this Agreement to be attached to the contract between the Builder and the Contractor. The Builder will provide Aqua with a copy of the construction contract between the Builder and the Contractor. The Contractor is obligated directly to Aqua by signing and delivering to Aqua the Commitment and Release in the form of Attachment D, which includes, without limitation, Contractor's agreements to indemnify Aqua, to maintain certain insurance coverage and, in performing work on the Extension Project, to be responsible for worksite safety and comply with all requirements contained in this Agreement and applicable laws and regulations.
- 4. Conduct of Construction.**

  - (a) Progress.** Builder agrees to proceed diligently to completion of construction of the Extension Project.

- (b) As Built Information.** Builder will provide accurate and complete as built information in accordance with Exhibit 1 (“As Built Information”) concurrently with progress of construction, will make the As Built Information available to the Aqua representative upon request of Aqua, and will supply complete As Built Information to Aqua prior to or upon Contribution of the final portion of the Extension Project.
- (c) Worksite Responsibility.** The Builder and the Contractor are responsible for the worksite, including the means and methods of construction, and safety precautions, procedures and programs. Builder will have an OSHA-competent person on-site at all times. Aqua shall have no duty to the employees or contractors of the Builder or Contractor for any safety aspects of the work. Under no circumstances shall Aqua be deemed to be responsible for the methods of construction or the safety precautions and procedures at the worksite, whether or not an Aqua representative is on site. Builder and Contractor are responsible for reviewing and executing all plans and changes in plans, construction methods and procedures, and changes in construction methods and procedures, whether or not required or reviewed by Aqua so that work is conducted in a safe manner for the protection of anyone on or near the Extension Project.
- (d) Compliance with Applicable Laws, Regulations and Specifications.** The Builder will install and complete the Extension Project in a workmanlike manner, in accordance with this Agreement, all applicable laws, regulations and ordinances, including without limitation the Pennsylvania Underground Utility Protection Law (or any successor) and any regulations thereunder, general water industry standards, fire flow requirements, environmental laws and regulations, and the Aqua specifications in effect for materials and for construction of pipelines and services lines as set forth in the Specifications for Builder Extension Pipeline Construction in Exhibit 2, as they may be modified and amended from time to time (all of the foregoing requirements are collectively referred to as the "Specifications"). Pursuant to the Pennsylvania Underground Utility Protection Law, before starting work, Builder will independently investigate and verify in the field the existence and location of underground utilities, whether or not indicated on the plans.
- (e) Chlorinating and Connection into Distribution Facility.** Except with the prior authorization of Aqua expressly in writing, the Builder is prohibited from chlorinating the Extension Project or making the connection of the Extension Project into the distribution facility of Aqua. These procedures will be performed by Aqua.
- (f) Maintenance and Repair.** Builder is responsible for all maintenance and repair of the installed Extension Project prior to Contribution, whether or not Aqua has commenced water service.

## **5. Representations and Warranties.**

- (a) Warranty of Extension Project by Builder.** The Builder hereby warrants that the water main and all other components of the Extension Project, including without limitation

integrity of trenches and integrity of paving and other restoration work, will not leak and will be free from defects in materials and workmanship for a period of one (1) year from the date of Contribution of the final portion of the Extension Project, and that the final As Built Information, when delivered to Aqua will be accurate and complete. The Builder will promptly proceed at its own cost and expense to make good all portions of the work or materials determined by Aqua to fail to conform with the Specifications or which are damaged or destroyed by removal of the non-conforming work or materials, and will replace or repair those portions to be in accordance with the Specifications, and will revise the As Built Information to be accurate and complete. If Builder fails to remedy or correct non-conforming work or materials or to revise the As Built Information to be accurate and complete, Aqua may bring the work or materials or As Built Information into conformation at the expense of Builder (for which Aqua may draw down on the Performance Bond or Letter of Credit and/or pursue any other available remedy).

- (b) **Adequate Financing.** Builder represents and warrants that it has adequate financing for completion of the Development.
  - (c) **Authorization.** Builder represents that it is duly organized and validly existing in the jurisdiction in which it is organized and that the execution, delivery and performance of this Agreement have been duly authorized by Builder.
6. **Employees.** The Builder and/or the Contractor will be the legal employer(s) of any and all employees and the sole contractually-obligated parties with any independent contractors working on the Extension Project. Aqua will not be the employer or joint employer of any such employees, and neither Aqua nor its representative will have any right to control or supervise the manner and means by which the work is performed. The Builder is responsible for any and all obligations arising by virtue of the employment or independent contract relationship, and compliance with all laws, ordinances, and regulations governing employment and independent contract relationships including, without limitation, obligations arising under the National Labor Relations Act, the Fair Labor Standards Act, the Older Workers Benefit Protection Act, Title VII of the Civil Rights Act, the Age Discrimination in Employment Act, the Americans with Disabilities Act, the Employee Retirement Income Security Act, the Occupational Safety and Health Act, and any similar state or local laws, ordinances, or regulations, as well as all obligations to withhold income or wage taxes, to pay unemployment compensation taxes, to provide workers compensation insurance, and to pay any unemployment compensation, workers' compensation benefits, or other compensation or benefits to such employees or contractors.

7. **Indemnification and Insurance.**

- (a) **Indemnity.** The Builder acknowledges and agrees that it has undertaken sole responsibility for the Extension Project pursuant to this Agreement. The Builder shall release, indemnify, protect, defend, and save harmless Aqua and all of its directors,

officers, employees and agents (hereinafter sometimes referred to as “indemnified parties”), from and against any and all claims, demands, actions, liabilities, losses, damages, penalties, costs and expenses (including reasonable attorneys fees and costs of investigation) that may be asserted against or incurred by any of such indemnified parties resulting from, arising out of or related to the Extension Project, and, with respect to the period prior to Contribution of the final portion of the Extension Project, the premises covered by grant(s) of Easement, whether or not caused in whole or in part by the active or passive, sole, concurring, contributory negligence or inherent nature of the operations of a party indemnified hereunder, including, without limitation, claims or liabilities arising out of or related to any and all damage or injury to any person (including loss of life), including any injury or injuries or loss of life to the employees of the Builder or Contractor or any other worker, or any property of any persons, corporations or other associations (including the parties hereto and their directors, officers, employees and agents).

- (b) Interpretation.** It is the intent of this provision to absolve, protect and defend Aqua and its directors, officers, employees and agents from any and all claims, demands, actions, liability, losses, damages, penalties and expenses (including reasonable attorneys’ fees and cost of investigation) arising out of or related to the Extension Project. This indemnity shall be liberally construed in favor of indemnification to the benefit of Aqua.
- (c) Notice of Potential Claims.** In furtherance of this indemnification, Builder must promptly report, in writing, to Aqua all accidents whatsoever arising out of, or in connection with, the performance of the work, whether on or adjacent to the work site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death, serious personal injury or serious property damage occurs, Builder will immediately report by telephone or messenger, or both, to Aqua.
- (d) Approval of Counsel; Costs and Expenses.** An indemnified party shall have the right to approve counsel appointed on its behalf pursuant to this indemnification, and shall be entitled to receive costs and expenses from Builder pursuant to this indemnification beginning upon receipt by indemnified party of formal notice of any claim. An indemnified party shall be entitled to costs and expenses from Builder regardless of the nature of the claim or claims asserted or the dismissal, resolution, settlement or discharge of any claim.
- (e) Environmental and Other Claims.** Indemnification pursuant to this Section shall include, without limitation, indemnification for action of any kind whatsoever, whether direct or indirect, by the United States Environmental Protection Agency (“EPA”) or Pennsylvania Department of Environmental Protection (“DEP”) related to or involving any work by Builder under this Agreement.
- (f) Severability.** The individual provisions of this indemnification are deemed to be

severable, and the invalidity or unenforceability of any portion of this indemnification shall not affect or impair such portion to the extent it has been deemed valid and enforceable, nor the remaining provisions of this indemnification, which shall continue in full force and effect.

- (g) **Insurance.** The Builder and the Contractor are obligated to provide and maintain the types and levels of insurance set forth in Attachment K to this Agreement.

## 8. Easements.

- (a) **Grant of Easement.** Prior to beginning work on the Extension Project, the Builder has provided Aqua with easement rights, by means of an Easement for all areas (excepting existing public rights-of-way where proper occupancy rights have been obtained for the Extension Project) in which the water main extension or any other part of the Extension Project will be installed. Builder has also supplied Aqua with copies of the underlying owners' deeds. If Builder is not the owner of all of the property through which the Extension Project will pass, Builder will also need to obtain easement(s) from the owner(s) of the property to allow it access to install the Extension Project.
- (b) **Easement Corrections.** The Builder is responsible for all expenses incurred by Aqua in the event that the Extension Project or other utilities are installed in violation of the terms of the Easements. In the event that any part of the Extension Project is installed by the Builder outside of the easement areas granted to Aqua the Builder agrees to relocate them within the easement areas and reimburse Aqua for all costs attributable to the improper location of the Extension Project or, with the approval of Aqua to obtain an additional easement or relocate or widen the easement area so as to locate the Extension Project within the easement areas granted to Aqua.
- (c) **Further Assurances.** During the term of this Agreement, and after Contribution or termination of this Agreement, without further consideration, Builder will provide, obtain, do, execute, acknowledge and deliver, all and every further act, conveyance, transfer, assignment, power of attorney and assurance as Aqua reasonably may require to more effectively convey, transfer to or vest in, and put Aqua in possession of, the required easements for all areas in which any part of the Extension Project is installed.

## 9. Cost Certification.

- (a) **Final Cost Certification.** Upon completion of the Extension Project, the Builder will certify to Aqua the actual cost of the construction within 45 days from the completion date. Builder will complete a certification form, satisfactory to Aqua using the format included in Exhibit 4 to this Agreement, which will provide the actual cost of the Extension Project (including the Administrative Fee and the Value Added Fee). Builder will supply the actual invoices to support the cost certification. Builder will represent that the stated cost is complete and accurate and indemnify Aqua against any claim that

the cost is not complete and accurate. Aqua reserves the right to review and make the final determination of cost. If Builder fails to submit the Final Cost Certification pursuant to the terms of Section 9 of this Agreement within two years of the completion date, at Aqua's sole discretion, Builder may forfeit some or all refunds due under this Agreement.

**(b) Books, Records and Auditing.** The Builder will keep adequate books and records with respect to the costs of the Extension Project and Aqua shall have the right at reasonable times to review and audit those books and records for a period of five years after Contribution.

**(c) Determination of Final Costs by Aqua.** If Builder has not provided a final cost certification to Aqua within 45 days following completion of the final portion of the Extension Project, Aqua will have the right to make such final cost certification based on the estimated project costs, or portion thereof, depending on whether the Extension was fully completed. Final costs that are determined by Aqua shall not be used to calculate Metered Connection Refunds or obligate Aqua to make such refund payments. Further, in accordance to the terms of this Section 9, Builder may forfeit some or all refunds if the Final Cost Certification is not submitted within two years from the completion date.

## **10. Contribution.**

**(a) Time of Contribution.** Upon completion of the Extension Project as described in Attachment B, and prior to receiving the first Metered Connection refund, Aqua shall conduct a post construction inspection and provide Builder with a list of required repairs, for which Builder is solely responsible to correct ("Punch List"). Provided that Builder has made all repairs on the Punch List and is not in breach of any provision of this Agreement, Aqua will notify the Builder in writing of the contribution of the Extension Project ("Contribution"). In order to effect Contribution, Aqua may waive the condition that Builder is not in breach of the Agreement; however, waiver of the condition will not constitute a waiver of Builder's contract breach. In its sole discretion, from time to time; Aqua may effect Contribution of a completed portion or portions of the Extension Project prior to completion of the entire Extension Project, by giving written notice to Builder. Aqua will receive Contribution for no additional consideration, such that the facilities become the property of Aqua (from which Aqua may service customers).

**(b) Title.** Builder hereby grants, sells, conveys, assigns, transfers, sets over to, and vests in Aqua its successors and assigns, effective the date of Contribution, all of Builder's right, title and interest, legal and equitable, in and to the Extension Project, free from all liens, security interests, encumbrances, restrictions and claims, to have and to hold the Extension Project, including its appurtenances, to Aqua its successors and assigns, forever, to its and their own use and benefit. The Builder agrees to make the proper reservations of title in its conveyances to others and to obtain the joinder of all parties necessary to give good and marketable title, so that the Extension Project is properly

conveyed to Aqua at the time of Contribution, and all necessary and appropriate easements and rights-of-way are conveyed to Aqua. Upon Aqua Pennsylvania Inc.'s request during the term of this Agreement, Builder will supply to Aqua such additional assurances as Aqua may request that the contractual arrangements necessary to convey good and marketable title have been made by Builder.

- (c) Matters in Connection with Contribution.** The following must be completed prior to Contribution of the final portion of the Extension Project:
- (i) Completion of the Extension Project in accordance with the Specifications;
  - (ii) The Extension Project passing all chlorination and other testing procedures performed by Aqua in accordance with its regular pre-service procedures;
  - (iii) Provision of accurate As Built Information to Aqua;
  - (iv) Final cost certification;
  - (v) Builder's certification, and provision of evidence satisfactory to Aqua that it has paid or discharged any mechanic's liens or other encumbrances which may have been filed against the Extension Project;
  - (vi) Builder's certification, and provision of evidence satisfactory to Aqua that Builder has paid or discharged the Contractor;
  - (vii) Payment to Aqua of any outstanding fees or other amounts owing Aqua pursuant to this Agreement; and
  - (viii) Such grant, revision, correction or confirmation of Easements, in addition to Easements granted prior to construction, which Aqua may require to convey all necessary and appropriate easements and rights-of-way.
- (ix) Repair of all Punch List Items
- (d) Further Assurances.** Builder for itself, its successors and assigns, agrees that, at any time, and from time to time after Contribution, at the request of Aqua its successors and assigns, and without further consideration, the Builder will provide, obtain, do, execute, acknowledge and deliver, all and every such further act, conveyance, transfer, assignment, power of attorney and assurance as Aqua its successors and assigns reasonably may require to more effectively convey, transfer to or vest in, and put Aqua its successors and assigns, in possession of, any of the Extension Project. Builder irrevocably constitutes and appoints Aqua its successors and assigns, as the Builder's true and lawful attorney with full power to institute and prosecute in the Builder's name or in the name of Aqua its successors and assigns, as the legal attorney of and for the Builder,

duly authorized, for the benefit of Aqua its successors and assigns, any and all proceedings at law, in equity or otherwise, which Aqua its successors and assigns, may deem proper for the collection and enforcement of any claim or right of any kind granted, sold, conveyed, transferred or assigned, or intended so to be by Contribution pursuant to this Agreement.

**11. Water Service upon Application.** Upon proper application being made to Aqua in the form of Attachment A, Aqua will furnish water service to each customer with a Metered Connection, as defined in Exhibit 3, under Aqua Pennsylvania Inc.'s tariff, rules, regulations and rates then in effect and subject to any changes, which may thereafter become effective. All charges for water service shall be payable to and collected by Aqua. The water service provided to any fire hydrants will be subject to the payment of the applicable hydrant rates and shall be billed in accordance with the Township Fire Hydrant Letter which is attached hereto as a part of Attachment G. Every metered connection requires a meter pit. Water meters will not be installed within any building.

**12. Refunds for Metered Connections to the Extension Project.** Provided Builder is not in default on any provision of this Agreement and has submitted cost accounting within two years of the completion date, Aqua agrees to refund to the Builder part of the Builder's cost of the Extension Project in the manner and in the amounts provided on Exhibit 3. Delays in refund payments will not result in any penalties, interest or increase in refund amounts.

## **B. RIGHTS AND REMEDIES**

**1. Event of Default.** The occurrence of any of the following events shall constitute an Event of Default under this Agreement:

- (a)** The Builder abandons work on the Extension Project, and does not provide Aqua with assurances and evidence satisfactory to Aqua, within ten (10) days after written notice to Builder from Aqua, of Builder's intention and ability to promptly recommence and complete work.
- (b)** The Builder fails to comply with any other provision of this Agreement and such failure continues for ten (10) days after written notice to Builder from Aqua provided that if within such ten (10) day period, Builder commences to correct such failure and diligently proceeds with such correction, the ten (10) day period shall be extended for such additional time as may be reasonably necessary for Builder to complete such correction.
- (c)** A case or proceeding by or against the Builder or otherwise affecting the Development is commenced under any federal or state bankruptcy, reorganization, insolvency, liquidation or similar law.
- (d)** Builder notifies Aqua it intends to terminate the Agreement.

- 2. Rights and Remedies of Aqua upon Default by Builder.** Upon an Event of Default as defined in Section B(1), Aqua may, in addition to and not in lieu of any other rights and remedies it may have as set forth in this Agreement or at law or in equity, exercise the following remedies separately and/or cumulatively:
- (a) Draw Upon the Performance Bond or Letter of Credit and Other Security.** Aqua shall have the right to draw upon the Performance Bond or Letter of Credit and any other security furnished by Builder pursuant to this Agreement.
  - (b) Require Additional Security.** Aqua shall have the right to require Builder to advance funds and/or provide additional security satisfactory to Aqua as may be permitted under regulations of the Pennsylvania Public Utility Commission (“PUC”), applicable law and/or Aqua Pennsylvania Inc.’s tariff on file with the PUC.
  - (c) Terminate Agreement.** Aqua may terminate this Agreement upon notice to Builder.
  - (d) Complete Extension Project.** Aqua shall have the right (but not the obligation) to complete the Extension Project, in its entirety or to any intermediate point, by independent contractors or by its own workers or such other persons, or in such other manner, or in any combination of the foregoing as Aqua may determine in its sole discretion. If Aqua elects to proceed with the work on the Extension Project, Aqua shall have the right to take possession of all existing materials and supplies of the Builder relating to the Extension Project for the purpose of including them in the improvement, and the Builder hereby assigns to Aqua all its right, title, easements and interest in and to such materials, subject to the contingency of Aqua’s election to proceed with work under this Section. If Aqua elects to continue or complete the Project upon the Builder’s default, Builder will not be entitled to any refunds under Exhibit 3, and Aqua may condition its continuation or completion of the Project (whether in its entirety or to any intermediate point) on the receipt of an advance of funds and/or security satisfactory to Aqua from Builder or third parties, as may be permitted under regulations of the Pennsylvania Public Utility Commission (PUC), applicable law and/or Aqua’s tariff on file with the PUC.
- 3. Rights of Aqua.** Among other rights and remedies that Aqua may have under this Agreement, and notwithstanding any other provisions of this Agreement, Aqua shall have the following rights which it may exercise in addition to and not in lieu of any other rights and remedies it may have as set forth in this Agreement or at law or in equity:
- (a) Right to Make Further Main Extension.** Aqua shall have the right to extend the water main installed under this Agreement, connect thereto and renew or enlarge the same without in any way changing the terms of its refunding obligation under this Agreement.
  - (b) Right to Specific Performance of Offer of Contribution and Grant(s) of Easement.**

The parties acknowledge and agree that money damages would be insufficient to compensate Aqua for breach of the Builder's covenants to contribute the Extension Project to Aqua, to the extent the Extension Project is actually installed, and to provide Easements to Aqua, as provided in this Agreement, and that, therefore, Aqua is entitled to specific performance of Builder's Contribution for completed portions of the Extension Project and to the Easements pursuant to Section A(8) and (10), and Attachment F.

**(c) Refusal to Accept Contribution.** If the Extension Project is not done in accordance with the Specifications or if the Builder does not comply with any of the Builder's obligations set forth in this Agreement, Aqua may refuse to accept Contribution of the Extension Project, in which event Aqua may (a) refuse to provide water service through the Extension Project main extension and to any parcel or building lots that would otherwise request service from that main extension, or (b) treat Builder as the owner of the Extension Project resulting in (i) Builder bearing all continuing responsibility for maintenance and repairs, (ii) removal of any existing water meters, (iii) requirement that Builder install a single meter pit for the Extension Project to receive water service as a single customer (with Builder responsible for any sub-metering after the single-point meter), (iv) ineligibility for refunds since Contribution will not be made and (v) preservation of Aqua Pennsylvania Inc.'s rights to any unpaid amounts under this Agreement and other remedies for Builder's breach of the Agreement.

**(d) Right of Set-Off.** Aqua may offset any of its claims against the Builder against any refunds or other amounts which Aqua may owe the Builder, or parties controlling, controlled by or under common control with the Builder (the Builder's Affiliates) either under this Agreement or other agreements between Aqua, or any of its affiliated or subsidiary Companies, and the Builder or Builder's Affiliates, whether or not related to the Development.

**(e) Emergency Repairs.** In the event of an emergency during or after the term of this Agreement prior to Contribution, Aqua shall have the right to make repairs to the Extension Project and charge the cost to Builder.

**(f) Attorney's Fees.** The Builder agrees that if suit is brought by Aqua against it to enforce this Agreement, including, but limited to, Aqua Pennsylvania Inc.'s right of indemnification, and Aqua prevails in such suit, Aqua shall be entitled to collect all reasonable costs and expenses of suit, including but not limited to reasonable attorneys fees.

**4. Rights and Remedies Cumulative; No Waiver.** No right or remedy conferred in this Agreement upon Aqua or otherwise available to Aqua is intended to be or shall be construed to be exclusive of any other right or remedy, but each and every such right and remedy shall be cumulative and shall be in addition to every other right and remedy given under this Agreement, under any of the documents or instruments to be furnished or delivered to Aqua pursuant to this Agreement, and now or hereafter existing at law, in

equity or by statute. No delay or omission by Aqua to exercise any right or power under this Agreement shall impair such right or power or shall be construed to be a waiver or acquiescence in any Event of Default, default or breach of this Agreement, nor shall the giving, taking or enforcement of any other or additional security under this Agreement operate to waive any rights, powers or remedies of Aqua and any single or partial exercise of any right or power by Aqua will not preclude other or further exercise thereof or the exercise of any other right, and no waiver will be valid unless in writing and signed by Aqua, and then only to the extent specified.

### C. **GENERAL**

1. **Term and Termination.** This Agreement shall continue in effect until the earlier of Contribution of the final portion of the Extension Project, termination of this Agreement, or the date which is five (5) years after the effective date of this Agreement, subject to the survival of certain provisions pursuant to Section C(5). Upon termination of this Agreement prior to Contribution of the final portion of the Extension Project, Builder will cease all work on the Extension Project and will cause Contractor to cease all work on the Extension Project.
2. **Governing Law.** This Agreement, all attachments hereto, and all documents and instruments to be furnished or delivered hereto, shall be governed by the laws of the Commonwealth of Pennsylvania without giving effect to conflicts of laws principles.
3. **Assignment; Change in Ownership.** The Builder shall not assign its rights and obligations under this Agreement, or transfer control or ownership of the Extension Project or any part thereof, directly or indirectly, voluntarily or involuntarily, without the prior written approval of Aqua.
4. **Taxes and Fees.** All federal, state and local taxes, excise taxes, permit fees, and similar fees and taxes in connection with this Agreement, including without limitation, any sales or use taxes and taxes on contributions in aid of construction, any and all income taxes imposed on AQUA in connection with the Extension Project as a result of Contribution or otherwise, and any and all income taxes imposed on AQUA as a result of Builder's obligation to pay taxes pursuant to this Section, in each case whether in effect on the date of the execution of this Agreement or subsequently imposed or assessed, are for the account of, and are to be paid by, Builder upon demand by AQUA.
5. **Survival of Provisions on Contribution or Termination.** All warranties, representations, agreements and covenants made by Builder in this Agreement, or in any document or instrument referred to in, or to be delivered or furnished pursuant to, this Agreement, will survive Contribution of the final portion of the Extension Project and any termination of this Agreement.
6. **Entire Agreement; Amendments.** This Agreement, together with all exhibits and

attachments, and the final executed form of all documents for which the form is set forth in the attachments, constitute the entire agreement between Aqua and Builder with respect to the Extension Project. Prior or contemporaneous discussions or agreements are not part of this Agreement, and are of no force or effect. This Agreement may be modified or amended only by a writing signed by the party against whom enforcement is sought.

7. **Severability.** The provisions of this Agreement and all other agreements and documents referred to herein are to be deemed severable, and the invalidity or unenforceability of any provision shall not affect or impair such provision to the extent it has been deemed valid and enforceable, nor the remaining provisions, which shall continue in full force and effect.
8. **Third Parties.** Nothing contained in this Agreement shall be deemed to confer upon the Contractor or any third party any right against Aqua.
9. **Headings.** The headings of any section or subsection of this Agreement are for convenience only and shall not be used to interpret any provision of this Agreement.
10. **Binding Agreement; Successors and Assigns.** This Agreement is binding on and will inure to the benefit of the parties and their successors and permitted assigns.
11. **Notices.** Notices, demands and requests required or permitted to be given under this Agreement (collectively Notices) must be in writing and must be delivered personally or by nationally-recognized courier or sent by United States certified mail, return receipt requested, postage prepaid. Notices must be addressed to the party at its address set forth below. A notice is effective when actually received or rejected. The initial addresses of the parties may be changed by appropriate notice:

**To Builder:**

Attn:

**To Aqua Pennsylvania, Inc.:**

Aqua Pennsylvania

762 W. Lancaster Avenue

Bryn Mawr, PA 19010

Attn: New Business Representative

**IN WITNESS WHEREOF**, the parties have duly executed this Agreement as of the day and year first above written.

**AQUA PENNSYLVANIA, INC.,**  
A Pennsylvania corporation

By: \_\_\_\_\_

Witness: \_\_\_\_\_  
New Business Representative

**BUILDER:**  
A Pennsylvania Corporation

By: \_\_\_\_\_  
[Authorized Signature]

Print Name: \_\_\_\_\_

Witness: \_\_\_\_\_  
[Authorized Signature]

Federal E.I. Number: \_\_\_\_\_

**JOINDER**

The Contractor executes this Agreement to acknowledge and agree to the terms and obligations imposed on the Contractor by this Agreement.

By: \_\_\_\_\_  
[Authorized Signature]

Print Name: \_\_\_\_\_

Witness: \_\_\_\_\_  
[Authorized Signature]

## Exhibit 1

### **Requirements for As Built Information**

The As Built Information for the Extension Project will accurately represent actual construction of the water main and appurtenances, be sufficient to permit Aqua to obtain the full benefit of the protections of the Pennsylvania Underground Public Utility Protection Law upon and after Contribution, and contain the following legible information, documented in detail in a project construction log and noted on a copy of the drawings:

- (1) Variations from the final Plan (which is incorporated by reference in Attachment B to this Agreement).
- (2) Limits of any rock encountered in the excavation.
- (3) Locations of vertical and horizontal bends, valves, tees and crosses relative to fixed points (*e.g.*, edge of curb, existing manholes, telephone poles, etc.).

## **Exhibit 2**

# **SPECIFICATIONS FOR BUILDER EXTENSION PIPELINE CONSTRUCTION**

## ***SECTION 1 - GENERAL***

### **1.01 TRENCH EXCAVATION**

The excavation and back-fill work shall conform to the AWWA Standard C-600 for the installation of Ductile Iron water mains and their appurtenances, plus changes and additions thereto.

All Federal, State, and Municipal, including OSHA regulations governing work of this nature shall be complied with by Builder and/or Contractor.

Dimensions for excavation will be according to the depth and width specified for the pipe size. The depth of the trench will be such so the proposed main has the depth of cover of four (4) feet, or as shown on the drawings.

Except at locations where rock or unsuitable material is encountered, extra care should be taken not to exceed the depth specified. If the excavation does exceed the proposed depth, the bottom of the trench should be back-filled in six-inch lifts and properly compacted until the desired level is reached to lay the pipe.

Sub-grade material must be suitable.

The following are the required trench sizes for the respective pipe diameters:

Up to and including:      6" & 8" pipe ---- 2.00' trench width  
   12" pipe ---- 2.50' trench width  
   16" pipe ---- 3.00' trench width

In areas of existing roadway, the excavation shall be completely closed at the end of each work day. The Builder shall provide temporary restoration of roadway immediately upon back-filling the trench.

### **1.02 ROCK EXCAVATION**

Excavation in rock shall be carefully performed and where blasting is necessary, care shall be taken to prevent damage of any kind to persons or property. Blasting shall be done in accordance with Federal, State and Municipal ordinances by qualified Operators, and shall be done in accordance with present day standards of good practice. Builder, at its sole expense,

shall secure all permits and shall meet all Federal, State, and Municipal requirements regulating the transportation, storage, and use of explosives.

Trenches excavated in rock shall be excavated to a depth of six (6) inches below the grade prescribed for the bottom of the pipe, and shall be re-filled to the proper grade with bedding materials, such as sand or highway screenings, that will provide an adequate cushion for the pipe.

In no case will excavated rock materials be acceptable for use in any portion of the backfill.

### **1.03 EARTH EXCAVATION**

"Earth", as a term for excavated material, shall mean all kinds of material excavated except rock as described in the foregoing, and roadway, driveway, and sidewalk paved surfaces.

### **1.04 PREPARATION OF SUBGRADE**

The bottom of the trench shall be prepared at the depths stated in Section 1.01 or as shown on the drawings, or as otherwise specified to provide a uniform and continuous support for the pipe. The sub-grade shall be prepared accurately by hand to insure the elimination of rock or other objects that may cause damage to the main.

### **1.05 ALIGNMENT AND GRADE**

The pipeline shall be laid and maintained to the required lines and grades as shown on the drawings or otherwise specified. The Builder shall provide survey stakes for all property lines, easements, service locations and curbs (if not installed). Curbs must be completed prior to the installation of the water main.

### **1.06 LAYING PIPE**

Every precaution must be taken to insure that foreign materials are kept from entering the pipe, both while it is setting above ground and especially while it is being installed. At no time should any debris, tools, rags, or any other material, be placed inside the pipe or fittings. At times when pipe laying is not in progress, a watertight plug shall close the open ends of the pipe. If pipes are dirty from sitting, or from transport, they must be washed and swabbed out before being installed.

Pipe shall be laid with bell ends facing the direction of laying, unless otherwise shown on the drawings. Before placing the pipe in the trench the pipe should be inspected for any dirt or foreign debris. After placing a length of pipe in the trench, the spigot end shall be centered in the bell and the pipe forced home and brought to the correct line and grade. The pipe may never be forced home by putting a piece of equipment on the bell end of the pipe. Care should be exercised when making each joint, and all joints shall be made in accordance with the pipe

supplier's specifications and instruction. If any deflection is made in the pipe joint it may not exceed the manufacturer specifications and the deflected joint should be blocked against the side of the trench with concrete or blocking stone.

The water main must be installed in a trench distinct and separate with a minimum of 5 feet horizontal clearance from any other utility or underground facility. A minimum clearance of one (1) foot is required when crossing over or under another subsurface utility. Also, these clearances must be maintained by other utilities installed after the water main.

### **1.07 MAKING MECHANICAL JOINTS**

Before the joint is assembled, the socket and spigot ends of the pipes shall be cleaned free of dirt, rust, excess coating, or other foreign matter which might prevent the rubber gasket from making an even watertight seal. The rubber gasket and the gland shall be thoroughly cleaned before being assembled in the joint.

To facilitate placing the rubber gasket on the spigot end of the pipe, and to provide lubrication between the pipe and the gasket so that the gasket will slide easily when drawn into place by the gland, the pipe and the gasket shall be coated with a lubricant supplied by the Manufacturer.

When assembling the joint, prior to tightening the bolts, care shall be taken to center the rubber gasket evenly in the socket. The bolts shall be taken up all the way around to draw the gland to bear evenly against the rubber gasket and then be tightened evenly in diametrically opposite pairs. Care shall be taken not to tighten any one pair of bolts excessively causing un-equal pressure on the gland. Over-stressing of bolts to compensate for poor installation practice shall be avoided.

Where necessary, Builder will use retaining glands on mechanical joint fittings. This type of gland has a series of set screws that must be tightened onto the pipe to a torque of 75 Ft. lbs.

### **1.08 MAKING PUSH-ON JOINTS**

Thoroughly clean out the bell. Remove all foreign matter: sand, mud, stone, ice, or excess tar. Small bits of dirt can be removed from the bell mouth by means of a damp or lubricated cloth. Insert gasket as per pipe manufacturers' specification.

Clean the plain end of the pipe and grind or file sharp edges, which might damage the gasket. Lubricant may be applied to the beveled nose. Place plain end in the companion bell and provide reasonably straight alignment. Push pipe straight home with the aid of a bar or more powerful means.

Check the assembly, the joint is completely assembled when the first painted stripe, closest to the spigot end, is no longer visible. Deflection should be taken after joint is assembled and must not exceed manufacturer and AWWA specifications.

When it becomes necessary to make push-on joints using field cut pipe, the plain end of the pipe shall be conditioned as follows: the outside of the cut end shall be tapered back approximately 1/8" at an angle of about 30 degrees, with the center line of the pipe before entering the pipe into the socket. This may be done with a coarse file or portable grinder. Care shall be taken to prevent damage to the gasket.

### **1.09 BACK-FILLING**

Back-filling shall proceed promptly as directed, after the pipe has been satisfactorily laid and jointed. The method of back-filling will be determined by the nature and character of the back-fill material available, and Federal, State, and Municipal regulations governing this work.

### **1.10 HAND OR MECHANICAL TAMP**

Special attention and supervision will be given to back-filling trenches. Unless otherwise specified, all trenches and excavations shall be back-filled in layers of six (6) inches and mechanically tamped to obtain maximum compaction. Back-fill material used around the pipe and to a level of twelve (12) inches above the top of the pipe shall be earth, free of stones, rock, broken paving or other hard substances that may cause damage to the pipe. The remaining trench shall be back-filled with material free of large stones or foreign matter. It is imperative that the back-fill material be carefully placed under and around the pipe and thoroughly compacted to provide complete and uniform support to the pipe. Bulldozers and other heavy equipment are not to be permitted to operate over the pipe until back-filling has been completed to within six (6) inches of the ground level or road surface.

### **1.11 VIBRATORY BACK-FILL**

Where appropriate, the Builder may tamp back-fill with a vibratory compactor, or approved equal. (For definition, vibratory compactor may be a "Rammax" type of equipment) Clean earth, sand, or other selected and approved material shall be hand tamped beneath and around the pipe to a point twelve (12) inches above the top of the pipe. The remaining trench shall be back-filled in twelve (12) inch loose lifts with a minimum of three (3) passes of the compactor for each lift up to ground level or road surface, or to a depth below the original surface to accommodate the type of surface repair required (i.e., paving, topsoil, and sod).

### **1.12 CORROSION CONTROL**

The Builder shall make such corrosion control system installations, and connections appurtenance to pipe installations as shown on the drawings or as appropriate.

All pipe joints, including valves, fittings, and tie-ins to existing piping shall be bonded with two (2) number 4 insulated wire.

Wires shall be attached to ductile iron and/or cast iron or steel pipe using equipment and

procedures recommended by manufacturers of thermite welding equipment for thermite welding copper wire to the above mentioned pipe.

The weld area should be ground or otherwise cleaned to bright metal before thermite welding. Builder to furnish cleaning equipment.

Each thermite weld shall be checked by striking it a hard blow with a two (2) pound hammer and simultaneously pulling firmly on the wire.

Electrical resistivity of the water main shall be checked at the expense of Builder by a Corrosion Engineer satisfactory to Aqua after back-filling and prior to re-paving.

The Builder shall pay special attention to the bonding of pipe joints. Where pipe geometry arising from vertical or sloping runs of pipe make thermite welding difficult, proper thermite welding equipment shall be used and/or use made of installing one end of the bond wires prior to pipe installation. The bond wires so installed should be long enough to extend to a horizontal surface, but never exceed six (6) feet in length.

### **1.13 RESTORATION**

The work covered under this item includes the replacement of all pavement removed for excavation of trenches or ordered for other purposes to complete the work indicated in the contract documents. Such restoration shall comply with the requirements and specifications of the State or municipal Authority who have jurisdiction and shall be completed within 90 days (or less if designated by the permit) after the date of the road opening.

### **1.14 INSTALLING FIRE HYDRANTS**

Fire hydrants are to be installed at a location approved by the local Municipality. Ideal locations for fire hydrants are on property lines. Hydrants are to be installed with the steamer nozzle cap fifteen (15) inches behind the face of the curb. All hydrants are to be installed with six (6) inch Class 52 cement lined ductile pipe, and a six (6) inch mechanical joint resilient seat valve attached to a fire hydrant tee or tapping sleeve.

Where possible the fire hydrant lead should be one straight run of pipe with no additional joints other than the mechanical joint at the hydrant. All joints should be restrained with retaining rings for mechanical joints and field lock gaskets for push-on joints.

The fire hydrant base should be blocked against undisturbed earth with concrete, the volume of which will be specified on the plan according to the pressure. All hydrant leads are to be installed at four (4) feet of cover so that a four (4) foot- six (6) inch hydrant will be used behind the curb. The safety flange should be flush or slightly higher one (1) to two (2) inches above the finished grade. If there is an obstruction which causes the hydrant lead to be deeper than four (4) feet an offset(s) shall be used to bring the lead back to four (4) feet of cover so an extension will

not have to be installed on the hydrant. If offsets are needed, they should be restrained and blocked according to the main installation specifications. Fire hydrant extension fittings shall not be used to raise the hydrant.

If rock is encountered in the excavation the trench must be dug six (6) inches deeper, filled with suitable material and tamped to bring the trench back to the required depth. The bottom of the trench should be hand leveled to insure a good bed for the pipe. A hydrant should be set on a flat piece of good quarry stone to keep it from settling. When the hydrant is blocked with concrete care must be taken to insure the drain holes are not clogged with concrete. The area around the hydrant base must then be back-filled with clean 3/4 inch stone at least to one (1) foot above the drain holes and a minimum of 1/3 cubic yards, and covered with a heavy mil plastic cover to prevent dirt from encasing the drain holes and to insure proper drainage. The hydrant trench must then be back-filled in six (6) inch layers and mechanically tamped until it is brought up to the finished grade.

Sufficient time must be allowed for the concrete blocking to set up before the hydrant is placed into service.

Hydrants must be covered with a plastic or burlap bag until it has been placed in service to warn that the hydrant is not usable.

### **1.15 ADJUSTING VALVE BOXES AND MANHOLES TO GRADE**

The Builder shall adjust to grade curb boxes, valve boxes and manholes. When this work is required prior to street re-surfacing, and traffic is to be maintained, macadam shall be placed around the valve boxes and/or manholes, and tapered from the top of the valve boxes and/or manholes to the existing paving as required for the safety of traffic, until the re-surfacing has been completed. The project shall be inspected prior to contribution for access to all curb stops and valve operators and any defective work shall be corrected by the Builder.

### **1.16 CONCRETE THRUST BLOCKING**

All tees and bends, both horizontal and vertical, fire hydrants, and blow-offs shall be blocked with concrete thrust blocks against undisturbed earth, as detailed on drawings with 3000 p.s.i. concrete. The blocking detail for vertical bends may be found on the main extension Detail Drawing. Concrete must not encase the fittings or appurtenances, nor may it encase the nuts and bolts.

### **1.17 HYDROSTATIC AND LEAKAGE TEST**

Hydrostatic pressure tests shall not be made until at least seven (7) days after concrete thrust blocks are installed. The Builder, at its option and expense, may use high early strength concrete

for thrust blocks in which case hydrostatic pressure tests shall not be made until at least three (3) days have elapsed.

The section of water main being tested shall be filled with water a minimum of 24 hours before the main is tested. The Builder shall insure that air is expelled from the pipeline in accordance with AWWA C-600, Section 4.1.3. Any taps necessary to release air or water from the main during testing shall be made at the Builders expense.

After the pipeline has been filled with water for 24 hours, the Builder shall conduct a hydrostatic or pressure test. The duration of the pressure shall be at least two (2) hours. Each section of water main shall be tested at 1 1/2 times the working pressure measured at the low point of the section of main being tested. The Builder shall not employ a test pressure, which exceeds the allowable pressure of any installed pipe, valve, or appurtenance.

The leakage test shall be in accordance with AWWA C-600, Section 4.1, except that the Builder shall provide an approved means for measuring the leakage. The leakage test may be conducted at the same time as the pressure test, provided leakage is suitably measured during the pressure test and a two (2) hour record is kept of water added to the pipeline.

### **1.18 CHLORINATION OF NEW WATER MAINS**

Special care should be taken to insure disinfection of new mains. Possible sources of contamination are from workmen and/or their equipment, and unavoidable foreign material present in the trench during construction.

Education of crewmembers as to the need for avoiding contamination of the main during construction is fundamental. Pipe should be strung on high ground. At all times when construction is not actually in progress, watertight plugs should be installed in all pipe openings. (Gunny sacks and rags are not adequate). Provision should be made to pump any water that might collect in the trench. Special care should be taken to avoid contamination of valves, fittings, and pipe interiors, both before and during construction; each should be inspected and, if necessary, cleaned before installation.

It is preferred that the chlorination process be completed prior to the water main being tapped for service line connections. If services from the main to the curb stop are to be installed before chlorination, the water mains must have previously passed hydrostatic pressure testing and each water service line shall be visually checked for leakage prior to backfill. At no time shall customer side service lines be connected to the curb stop before the main has been thoroughly sterilized and passed water quality testing.

### **1.19 AUTOMATIC AIR RELEASE VALVE ASSEMBLIES**

Air release valve to be APCO Model 200 where an automatic air release valve is requested on the drawing and at appropriate locations to insure the proper filling, venting and chlorination of

the water main. They are to be installed in pre-fabricated concrete pits in accordance with Drawing E-7818.

## **1.20 MANUAL AIR VENT AND CHLORINATION ASSEMBLY**

Manual air vents and chlorination assemblies are to be installed wherever specified on the drawing and at appropriate locations to insure the proper filling, venting and chlorination of the water main. They are to be installed as per the main extension Detail Drawing.

## **1.21 BLOW-OFF**

Where designated on the drawings, a blow-off assembly will be required at the end of pipe runs to facilitate venting and flushing of the main.

Circumstances may require the installation of a temporary blow-off at certain locations to permit chlorination and flushing of the main prior to connection with existing facilities.

The blow-off assembly shall be installed and restrained with rail and concrete in accordance with the main extension Detail Drawing.

## **1.22 Existing Facility Shutdowns and Tie-Ins**

The Builder shall protect and maintain existing water mains in service. If an existing water main is damaged, service shall be restored promptly and Builder will be billed for the expense.

The Builder shall not move, relocate, or in any other way interfere with the use of the existing pipelines, including the operation of all valves.

Aqua will require at least 48 hours notification of any work by the Builder that will require a shutdown. All preparatory work must be totally finished one day before a shutdown will be scheduled. All work requiring a shutdown, once started, must be worked on continuously until all service is restored.

Aqua reserves the right to designate the day and time when water mains may be shut down and may require that this work be done at night or on a weekend.

Methods used to complete the work must minimize the duration of the shutdown. Should Aqua determine that a shutdown would be detrimental to service for existing customers, Aqua may require an alternate piping or tie-in arrangement to preclude the need for a shutdown.

The Builder shall dig test pits prior to making any connections to existing water mains in order to determine the exact location, elevation, diameter, and type of the existing pipe.

## ***SECTION II - SERVICE LINES***

### **2.01 SERVICE LINES - GENERAL**

The pipe leading from the distribution main to the plumbing system of individual premises is commonly called a service line. Each service line consists of two (2) main parts:

- (1) The service connection, which extends from the main in the street to the curb and is usually, owned by the utility.
- (2) The portion, which extends from the curb to the building and is usually, owned by the customer. All Customer owned service lines shall require a meter pit to be installed at a location approved by Aqua.

The service pipe is generally connected to the distribution main by means of a corporation stop inserted in the main. The insertion is normally accomplished while the main is in service and under pressure, and is thus known as a "wet" connection. Occasionally, outlets are provided in the main when it is originally installed, particularly if the service connections are large.

### **2.02 SERVICE INSTALLATIONS AND ACCESSORIES**

The method of making service connections at the main varies with the size and material of the service and the size and material of the main to which it is attached. If the size and wall thicknesses of the main are sufficient to provide adequate full threads, 1 inch to 2- inch services may be connected by direct drilling and tapping of the main. Tapping machines designed for drilling, tapping, and insertion of the corporation stop under pressure are required. The Builder shall provide all tapping equipment, accessories, and supplies necessary to make service line taps on the water main.

All services shall be installed at four (4) feet of cover to the finished grade, and must be in trenches distinctly separate from any other utility or underground line.

### **1 INCH SERVICES**

The minimum size service for all properties shall be 1" type "K" soft copper pipe. All 1-inch services will be tapped 22-1/2 degrees above horizontal on the main. All services must have sufficient slack copper to allow for slight settlement and soil load on the service line. The corporation should have one to three threads exposed out of the main to make sure it is properly tightened, but not over tightened. All corporations must have AWWA taper (Mueller "CC") thread into the main and copper tube size quick joint compression connections on the outlet side. Every service run shall be installed with one straight run of copper containing no joints, and services shall all be run on a perpendicular to the road and/or water main.

### **1-1/2 INCH AND 2 INCH SERVICES (Use Type "B" corporation)**

All 1-1/2 inch and 2 inch services shall be installed with the tap made at top dead center on the main. The corporation will have an AWWA taper (Mueller "C") thread into the main and an outlet of increasing iron pipe thread (outlet is one size larger than inlet). The corporation shall have one to three threads exposed to insure proper tightening but not over tightening. The service will consist of an approved "swing" joint which consists of one (1) brass reducing ell and two (2) brass service ells and a copper to iron male coupling. The service will then consist of a straight run of copper to a curb stop one foot behind the curb, and shall be run on a perpendicular to the road and/or water main. All copper service connections shall be CTS quick joint compression type connections. The curb stop shall have a valve box placed over it and properly supported so as not to settle on the service line.

### **4 INCH AND LARGER SERVICES**

All 4 inch and larger services shall be installed with a fire hydrant tee and resilient seat gate valve or tapping sleeve and resilient seat tapping valve. The service line will be class 52 cement lined ductile iron pipe and shall be run perpendicular to the road and/or the water main. The joint out of the valve must have a retaining ring, and if any other joints or fittings are necessary they must be restrained with "Loctite" (or equal) gaskets for push-on joints or retaining rings for mechanical joints. All fittings must be mechanical joint and must be blocked to the same specifications as stated for water main installation. Services will be run one foot behind the curb, and if not being immediately connected to the customer's service line shall have a water tight plug installed on the end of the main.

## ***SECTION III - MATERIALS SPECIFICATIONS***

### **3.01 DUCTILE IRON PIPE**

All pipe shall be ductile iron conforming to ANSI specification A 21.51 (C-151), 18 feet nominal length, cement lined B THK A 21.4 AWWA (C-104) (BCL &SC) CTD OD, Tyton joint A 21.11 complete, Class 52.

**Suggested Suppliers:** U.S. Pipe & Foundry Company  
Atlantic States Pipe Company  
Griffin Pipe Company  
National Water Works

### **3.02 COMPACT PIPE FITTINGS**

Compact mechanical joint fittings, 3 inch to 12 inch shall be manufactured of ductile iron and have a pressure rating of 350 p.s.i., in accordance with the requirements of ANSI / AWWA C 153 / A 21.53-00 Standard, or revisions thereto. Fittings shall be a nominal wall thickness equal to or exceeding Class 54 ductile iron pipe and be cement lined, in accordance with ANSI AWWA C 104 / A 21.4-95 Standard.

Mechanical joint assemblies, including gaskets, glands, bolts and nuts, shall be in accordance with the requirements of ANSI / AWWA C 111 / A21.11-00 Standard.

All compact fittings shall be clearly and legibly cast or stamped with the inscription "C 153" and must be made in the U.S.A.

**Suggested Suppliers:** U.S. Pipe & Foundry Company L /B Water Service  
A-1 Pipe Company Exeter Supply  
Atlantic States Pipe Company Griffin Pipe Company  
National Water Works

### **3.03 VALVES**

All valves 3 through 12 NPS shall be Resilient-Seated Gate Valves for water systems as set forth in AWWA Standard C 509-01 for cast iron valves and AWWA C 515 reduced wall resilient seated gate valves for ductile iron valves and/or revisions made thereto.

1. General: All valves shall be iron body, resilient seated gate valves with non-rising stem, and mechanical joints.
2. Direction of opening: Open right (clockwise) or open left (counter-clockwise) as indicated on the drawings.

3. Wrench nut: Shall be 1-15/16 inch square at top, 2 inch squared at base, and 1-3/4 inch in height. Arrows shall be cast in the nut to indicate direction of opening. The "word" open shall also be cast in nut per AWWA specs. Nuts shall be color-coded per AWWA specs, i.e. red for open right, black for open left.
4. Stem Seal: O ring.
5. Joint Accessories: Mechanical joints are to include all necessary gaskets follower rings and bolts completely assembled to the valve to make a complete joint. Tapping sleeve and valve combinations are also to include the necessary gaskets, follower rings and bolts completely assembled to the valve and sleeve to make a complete to joint.
6. Coating: Fusion bond with epoxy coating - inside and out on all resilient wedge valves.

**Accepted Manufacturers:** Clow Valve Company  
U.S. Pipe & Foundry Company  
American Flow Control Company  
Mueller Company  
Kennedy Valve Company

### **3.04 MECHANICAL JOINT RESTRAINT SYSTEMS**

In addition to concrete reaction backings, all mechanical joint ductile iron fittings shall require restrained joint systems and shall be installed according to the manufacturer's standard recommendations. EBAA Iron 1100 series or Ford 1400 series restrained systems shall be used.

### **3.05 FIRE HYDRANTS**

#### **GENERAL:**

All fire hydrants and related accessories are to be top quality and meet or exceed the AWWA Standard C 502-94, and any revisions thereto, covering Dry Barrel Fire Hydrants for ordinary water works service. The hydrants shall also conform to the basic features and/or details set forth below.

**NOTE: Certain Aqua service areas operate with an open right valve system and other areas operate with an open left valve system. Direction of hydrant valve opening must coincide with direction of valve system in area of Building project.**

## HYDRANT - OPEN RIGHT ONLY

1. Maximum Pressure 200 p.s.i.
2. Inlet Connection 6-inch M.J. Base with accessories to accept 6-inch ductile iron pipe.
3. Nozzles "Three-Way" two-2 1/2 National Standard thread hose nozzle with caps and chains. Pumper nozzle with 4 1/2 inch opening and external National Standard hose threads, nozzle cap, and chain.
4. Operating Nut Shall be one-piece bronze casting with or without a ductile iron weather shield. The operating nut should be a Pentagon 1 1/2- inch, measured point to flat at base nut and 1 7/16-inch at top.
5. Direction of opening Right - (Clockwise)
6. Depth of Bury 4 feet 6 inches (4 feet when required).
7. Size of Main Valve 5 1/4 inch.
8. Basic Valve Style Compression.
9. Barrel and Stem Type Breakaway or traffic safety feature with valve remaining closed upon vehicular impact. Upper and lower barrels joined approximately 2 inches above the ground line by a separate and breakable "swivel" flange, providing 360 degrees rotation of the upper barrel.
10. Main Valve Assembly The drain valve assembly shall be fully automatic. Valve seat ring and drain ring shall be provided with not less than two (2) openings and shall be capable of draining the barrel at a rate of not less than 5 G.P.M.
11. Drain way Shall be all bronze.
12. Seat Ring Shall thread into a bronze drain ring. Pressure seals shall be rubber gaskets or "O" rings.

- |     |                        |  |
|-----|------------------------|--|
| 13. | Main Valve & Seat Ring | To be removable through the upper barrel from above ground.  |
| 14. | Hydrant                | To be dry top design. The chamber shall contain a lubrication of grease or oil, which is injected through the top of the operating nut, or provide an external means to lubricate the operating mechanism. |
| 15. | Color                  | Aluminum color for portion of hydrant above ground line.   |

**As Manufactured By:** Mueller Company Centurion A-423  
 American Darling B-84-B  
 Waterous - Pacer WB-67  
 US Pipe - Model 94  
 Kennedy - K81

**HYDRANT - OPEN LEFT ONLY**

- |    |                      |   |
|----|----------------------|---|
| 1. | Maximum Pressure     | 200 p.s.i.  |
| 2. | Inlet Connection     | 6-inch M.J. Base with accessories to accept 6- inch ductile iron pipe.  |
| 3. | Nozzles              | "Three-Way" with two 2-1/2-inch hose nozzles with caps and chains, National Standard threads and one 4 1/2 inch pumper nozzle with cap and chain, National Standard thread.                     |
| 4. | Operating Nut        | 1-1/2 inch Pentagon operating nut.  |
| 5. | Direction of opening | Left (counter clockwise)  |
| 6. | Depth of Bury        | 4 feet, 6 inches.   |
| 7. | Size of Main Valve   | 5-1/4 inches.   |
| 8. | Basic Valve Style    | Compression.  |
| 9  | Barrel and Stem Type | Break away or traffic safety feature with valve remaining closed upon vehicular impact. Upper and lower barrels joined approximately 2-inches above the ground line by a separate and breakable |

- "swivel" flange, providing 360 degrees rotation of the upper barrel.
10. Main Valve Assembly The drain valve assembly shall be fully automatic. Valve seat ring and drain ring shall be provided with not less than two (2) openings and shall be capable of draining the barrel at a rate of not less than 5 G.P.M.
  11. Drainway Shall be all bronze.
  12. Seat Ring Shall thread into a bronze drain ring. Pressure seals shall be rubber gaskets or "O" rings.
  13. Main Valve & Seat Ring To be removable through the upper barrel from above ground.
  14. Hydrant To be dry top design. The chamber shall contain a lubrication of grease or oil which is injected through the top of the operating nut or provide an external means to lubricate the operating mechanism.
  15. Color Yellow

**As Manufactured by:** Waterous - Model: Pacer WB-67  
 American Darling B-84-B  
 Mueller Company Centurion A-423  
 US Pipe - Model 94  
 Kennedy - K81

### **3.06 COPPER SERVICE TUBING**

Only Type K copper tubing shall be used for service lines, sizes 1 inch through 2 inch.

**Suggested Suppliers:** Exeter Supply Company  
 U.S. Supply Company

### **3.07 BRASS SERVICE LINE FITTINGS**

**All Corporations and Curb Stops will be 300# BALL VALVE only. Plug or Key style Stops and Corporations will not be acceptable. All service fittings sizes 1" through 2" are to be CTS quick joint compression type connections.**

All brass goods and related accessories are to be red brass, in accordance with ASTM - B 62 and AWWA Standard C 800 latest revision. All service line valves and fittings must be manufactured from a brass alloy with a metal content consisting of 85% copper and 5% each of tin, lead, and zinc. (85-5-5-5 Spec.) All suppliers must certify in writing that the metal used and materials supplied meet AWWA specification C 800 (ASTM-B62).

A.P.A. #	AY MCDONALD	MUELLER	FORD	AQUA DESCRIPTION
				<b>300 # BALL VALVE CORPORATIONS</b>
10039	4701BQ	B25008	FB1000Q	1" AWWA/CC THREAD INLET x CTS QUICK JOINT
10041	3121B	H10003	FB800	1 ½" AWWA/CC THREAD INLET x INCREASING IP OUTLET
10049	4701BQ	B25008	FB1000Q	1 ½" AWWA/CC THREAD INLET x CTS QUICK JOINT
10051	3121B	H10003	FB800	2" AWWA/CC THREAD INLET x INCREASING IP OUTLET
10059	4701BQ	B25008	FB1000Q	2" AWWA/CC THREAD INLET x CTS QUICK JOINT
				<b>300 # BALL VALVE CURB STOPS</b>
12039	6100Q	B-25209	B44-444	1" CTS COMPRESSION/QUICK JOINT - BOTH SIDES
12059	6100Q	B-25209	B44-666	1 ½" CTS COMPRESSION/QUICK JOINT - BOTH SIDES
12069	6100Q	B-25209	B44-777	2" CTS COMPRESSION/QUICK JOINT - BOTH SIDES

### 3.08 CURB BOXES - 2 1/2 INCH

Curb boxes for domestic water service only shall be cast iron when installed behind curbing in either grass or sidewalks. Lids shall be marked "Water". Curb boxes installed within paved areas or driveways require valve box tops and lids over the curb box to protect the curb box from traffic loads

**As manufactured by:** Tyler Pipe (Item Number 94E) 40"- 60" height  
 Bingham & Taylor (Figure Number 4901-94E) 40" – 60" height

**Suggested Suppliers:** Exeter Supply Company      L /B Water Service  
 A-1 Pipe Company                                      National Water Works

### 3.09 VALVE BOXES

All valve boxes shall be cast iron slip style three part boxes (lid, top, and bottom). Where fire lines, including residential sprinkler services, are installed the lid shall be marked "Fire".

**As manufactured by:** Tyler Pipe (Item Number 564-A, 6855 Series)  
Bingham & Taylor (Size Number: 5564-S, Figure Number: 4908)

**Suggested Suppliers:** A-1 Pipe  
Exeter Supply  
L/B Water Service  
National Water Works

### **3.10 CATHODIC PROTECTION**

All Cathodic Protection materials shall be in accordance with designs and specifications.

**Suggested Suppliers:** PSG/Corrpro Inc.  
Matcor, Inc.

### **3.11 CLAMPING DEVICES**

Socket clamps, anchor straps, and tie rods, used to anchor pipe fittings, shall be as manufactured by the Grinnell Company, Inc., Stellar Corporation, Cetow Corporation, or approved equal.

## Exhibit 3

### Refund Definitions and Explanation

A refund will be paid to the Builder for each Metered Connection that is made to the main extension within the period of five (5) years from the date of this Agreement (“Refund Period”). In no event will Aqua be required to refund more than the total cost of the Extension Project as determined by the final, accepted Certification of Final Project Cost. Which method of refund (as described below) is applicable will depend on whether, in Aqua’s judgement, the main extension is or is not primarily for the connection of residential homes, commercial properties or properties served by multi meter manifolds to the Aqua distribution system. Aqua has no obligation to refund all or a portion of the project cost beyond the refund computed under the method described below. Builder acknowledges that some portion of the project cost may never be refunded. Any un-refunded portion of the Extension Project cost will become the property of Aqua as a non-refundable contribution in aid of construction.

(a) Residential Homes: For each Metered Connection made during the said five-year period to a main extension determined to be primarily for Residential Homes, the Builder shall be entitled to a refund equal to the average installed cost of thirty-five (35) feet of the said Extension Project. This refund shall be paid in five (5) equal installments (20% of the refund) for the five consecutive years beginning the first full calendar year following the date when the Metered Connection is made. In determining the cost per foot, the actual cost of the Extension Project shall be divided by the overall length of the main calculated in feet. The actual Extension Project cost shall, for these purposes, be the Total Project Cost as certified by the Builder in the final, accepted Certification of Final Project Cost, plus the cost of fire hydrants (to the extent not included in the Total Project Cost), but excluding taxes. The maximum refund per Metered Connection shall be \$2,000 for Residential Homes.

(b) Structures other than Residential Homes. For Metered Connections made during the said five (5) year period to a main extension determined to be primarily for structures that are Commercial or Public facilities, the Builder shall have the option to select the refund formula set forth in subparagraph (a) above (subject to the \$2,000 cap per Metered Connection, or the following formula, wherein the Depositor shall be entitled to a refund equivalent to 2.25 times the metered revenue from the sale of water received by Aqua for each Metered Connection to the aforesaid main during the first full calendar year following the date when the Metered Connection is made. When an option is selected, it is understood that all Metered Connections to the main for structures other than residential homes will be subject to the same refund formula.

There can only be one Metered Connected for each customer account. A Metered Connection will not arise from the installation of a fire service line, an independent irrigation line, existing

domestic service line, or other type of non-domestic service line to the main that is being transferred from an existing water main or line.

The Builder shall have no right to refunds under this Agreement except with respect to Metered Connections made directly to the water main installed under this Agreement and not water mains installed pursuant to any other agreement. Delays in refund payments will not result in any penalties, interest or increase in refund amounts.

The payment of refunds will not commence until Contribution of the final portion of the Extension Project. If Builder fails to complete the Final Cost Certification pursuant to the terms of Section 9 of this Agreement, at Aqua's sole discretion, Builder may forfeit some or all refunds due under this Agreement. The Builder will not be entitled to refunds during any period of time during which it, or any person or entity it controls, is controlled by or is under common control with, is in default under this Agreement or any other agreement with Aqua or its affiliated companies.

Sample Only

## **Exhibit 4**

### **Certification Form for Final Project Cost**

**\*\*\* ACTUAL COSTS MUST BE SUBMITTED WITHIN 45 days OF PROJECT COMPLETION \*\*\***

#### **Requirements for Cost Certification:**

- 1. Enter Total Cost for Water Main, Fire Hydrant(s) and Service Connections on attached document and execute this document**
- 2. Submit copies of Contractor invoices supporting costs entered on Cost Accounting Certification**
- 3. Submit all documents to the New Business Department**

**Aqua Pennsylvania  
762 W. Lancaster Avenue  
Bryn Mawr, PA 19010  
Attn: New Business Representative**