



October 7, 2024

Hon. Sherri L. Golden
Secretary to the Board
New Jersey Board of Public Utilities
44 South Clinton Street, 1st Floor
P.O. Box 350
Trenton, New Jersey 08625

Re: In the Matter of the Petition of New Jersey-American Water Company, Inc. for: (1) Approval of its Agreement with Shrewsbury Township, New Jersey for the Purchase and Sale of Water System; (2) A Determination that the Purchase Price is Reasonable; (3) A Determination that the Transaction Costs are Reasonable; and (4) For Such Other Approvals as May Be Necessary to Complete the Proposed Transaction

BPU Docket No.: _____

Dear Secretary Golden:

Enclosed for filing is a verified Petition on behalf of New Jersey-American Water Company, Inc. in connection with the referenced matter. Kindly file the Petition and advise of the docket number assigned to this case.

Please do not hesitate to contact me should you have any questions or require additional information.

Respectfully submitted,

A handwritten signature in blue ink that reads "Stephen R. Bishop".

Stephen R. Bishop

SRB:dlc

Enclosure

cc: Attached service list (via email, w/enc.)

**I/M/O the Petition of New Jersey American Water Company, Inc. for
(1) Approval of its Agreement with Shrewsbury Township, New Jersey for the Purchase and
Sale of Water System; (2) A Determination that the Purchase Price is Reasonable; (3) A
Determination that the Transaction Costs are Reasonable; and (4) For Such Other Approvals
as May Be Necessary to Complete the Proposed Transaction**

BPU Docket No. WM_____

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**I/M/O the Petition of New Jersey American Water Company, Inc. for
(1) Approval of its Agreement with Shrewsbury Township, New Jersey for the Purchase and
Sale of Water System; (2) A Determination that the Purchase Price is Reasonable; (3) A
Determination that the Transaction Costs are Reasonable; and (4) For Such Other Approvals
as May Be Necessary to Complete the Proposed Transaction**

BPU Docket No. WM_____

Service List

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**STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES**

**IN THE MATTER OF THE PETITION OF
NEW JERSEY-AMERICAN WATER
COMPANY, INC. FOR: (1) APPROVAL OF
ITS AGREEMENT WITH SHREWSBURY
TOWNSHIP, NEW JERSEY FOR THE
PURCHASE AND SALE OF WATER
SYSTEM;(2) A DETERMINATION THAT THE
PURCHASE PRICE IS REASONABLE; (3) A
DETERMINATION THAT THE
TRANSACTION COSTS ARE REASONABLE;
AND (4) FOR SUCH OTHER APPROVALS AS
MAY BE NECESSARY TO COMPLETE THE
PROPOSED TRANSACTION**

**BPU DOCKET NO.:

PETITION**

**TO THE HONORABLE COMMISSIONERS OF THE
NEW JERSEY BOARD OF PUBLIC UTILITIES:**

I. PRELIMINARY STATEMENT

New Jersey-American Water Company, Inc. (“NJAWC”, the “Company” or “Petitioner”), a public utility corporation of the State of New Jersey, with its principal office at 1 Water Street, Camden, New Jersey 08102, hereby petitions the New Jersey Board of Public Utilities (the “Board” or “BPU”) for: (1) approval pursuant to the provisions of the Water Infrastructure Protection Act, N.J.S.A. 58:30-1 *et seq.* (“WIPA”) of an agreement between Shrewsbury Township, Monmouth County, New Jersey (the “Township”) and NJAWC (the “Agreement”); (2) a determination that the purchase price (the “Purchase Price”) pursuant to the Agreement is reasonable and thus the rate base of the Township water system; (3) approval that NJAWC’s transaction, closing and transition costs (“Transaction Costs”) are reasonable and

prudent and may be deferred for recovery in a future base rate case; and (4) such other approvals as may be necessary to complete the proposed transaction (the “Transaction”). This Petition is filed pursuant to the provisions of WIPA and N.J.A.C. 14:1-5.10. In support thereof, Petitioner states as follows:

II. THE CONTRACTING PARTIES

1. NJAWC is a regulated, public utility corporation engaged in the production, treatment and distribution of water and collection and treatment of wastewater within its defined service territory within the State of New Jersey. Said service territory includes portions of the following counties: Atlantic, Bergen, Burlington, Camden, Cape May, Essex, Gloucester, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Salem, Somerset, Union and Warren. NJAWC maintains its principal office at 1 Water Street Camden, New Jersey 08102. Within its service territory, NJAWC serves approximately 668,000 water and fire service customers and approximately 64,200 wastewater service customers.
2. Shrewsbury Township is a Township in Monmouth County, New Jersey. The Township was originally formed on October 31, 1693, and was created as a township by the Township Act of 1798 of the New Jersey Legislature on February 21, 1798. The Township is governed pursuant to the Faulkner Act. The governing body is comprised of the Mayor and the Township Council. The 2020 United States Census counted 1,076 people in the Township. The Township owns and operates a potable water system (the “System”). Through the System, the Township serves 265 water service customers of the Alfred Vail Mutual Association located in the Township.

III. BACKGROUND

3. In 2015, the State Legislature enacted WIPA, finding that proper maintenance and operation of water and wastewater systems is critical to protect public health and that it is in the public interest for public water and wastewater systems facing challenges in doing so be provided a feasible option to transfer, sell or lease their “assets to a capable private or public entity with the financial resources and expertise to improve management, operation, and continued maintenance of the assets.”¹
4. WIPA establishes several steps necessary to effectuate the sale of the Systems pursuant to WIPA. Those steps and the legal and historical background follow.
5. In order to effectuate a sale of the Systems pursuant to WIPA, the Township was first required to determine that an emergent condition exists.² N.J.S.A. 58:30-5 provides a listing of five emergent conditions, only one of which must be met to effectuate a sale pursuant to WIPA.
6. Pursuant to N.J.S.A. 58:30-5, in order to determine whether WIPA was applicable to the Systems, the Township engaged the engineering firm of Colliers Engineering & Design (“Colliers”). On September 21, 2021, Colliers completed its “Emergent Condition Evaluation Report-Water System Sale via the Water Infrastructure Protection Act, Township of Shrewsbury, Monmouth County, New Jersey” (the “Emergent Condition Report”) and issued it to the Township. The Emergent Condition Report found that the System met Emergent Conditions Nos. 4 and 5, which read as follows:

¹ See N.J.S.A. 58:30-2.

² N.J.S.A. 58:30-4.

- (4) There is a demonstrated lack of historical investment, repair, or sustainable maintenance as determined by the department, or material damage to the infrastructure of the system; or
7. The system owner lacks the financial, technical, or managerial capacity to adequately address any of the foregoing on a sustainable basis or own and operate the system in a way that supports economic activity in the municipality on a sustainable basis.³
 8. On October 21, 2021, the Township accepted and adopted the Emergent Condition Report.
 9. On July 19, 2022, following a procurement process, the Township approved the engagement of NW Financial Group, LLC as its independent financial advisor.
 10. On June 13, 2023, the Township adopted Resolution No. 2023-65 accepting the Emergent Condition Report prepared by Colliers and certifying that emergent condition existed and further adopted the “Final Report, Township of Shrewsbury New Jersey Water System Asset Valuation” (the “Asset Valuation Report”) prepared by NW Financial. A copy of that resolution is attached hereto as **Exhibit A**.
 11. The Township submitted the Emergent Condition Report and the Asset Valuation Report to the New Jersey Department of Environmental Protection (“DEP”) on June 20, 2023, pursuant to N.J.S.A. 58:30-5e.
 12. The DEP reviewed the Emergent Condition Evaluation Report and other material. On July 21, 2023, DEP issued a determination that approved the Township’s certification as to the existence of Emergent Condition No. 4. A copy of the DEP July 21, 2023 Determination Letter is attached hereto as **Exhibit B**.
 13. Pursuant to N.J.S.A. 58:30-5f, on April 14, 2023, the Township issued a Public Notice of the DEP’s approval of Emergent Condition No. 4 and provided notice of the 45-day

³ N.J.S.A. 58:30-5c (4) and (5) .

petition period pursuant to N.J.S.A. 58:30-5g for the public to have the opportunity to protest the proposed sale of the System pursuant to WIPA without referendum.

14. The petition period closed May 29, 2023, without any protest having been filed.

15. Pursuant to N.J.S.A. 58:30-6, on September 16, 2023, the Township issued a Request for Qualifications. NJAWC was the only bidder respondent to the Request for Qualifications.

16. Following its review of prospective bidder qualifications, the Township adopted Resolution No. 2023-91 pursuant to N.J.S.A. 58:30-6b. By that resolution, it was stated that:

“WHEREAS, the only RFQ submitted was by New Jersey American Water company and the Township Engineer finds them more than qualified and now request a proposal for the purchase of the system; and WHEREAS, The Township of Shrewsbury is seeking authorization to ask NJAWC to respond to a Request for Proposal to purchase the water system; and, WHEREAS, The Proposal document once received will be subject to review by the BPU which could take up to 90 days.

(See **Exhibit C**, attached hereto)

17. Following this resolution, on November 20, 2023, the Township issued its “Request for Proposal Sale of Water System Request for Proposal Documents”.

18. On December 18, 2023, NJAWC submitted its proposal to the Township.

19. Pursuant to N.J.S.A. 58:30-6c, on February 20, 2024, the Township unanimously adopted Resolution No. 2024-36 authorizing negotiations with NJAWC. (See **Exhibit D** attached hereto).

20. Thereafter, the Township began negotiations with NJAWC leading up to the Agreement.

21. On July 9, 2024, the Township adopted Resolution No. 2024-69 approving the execution of the Agreement, and authorizing NJAWC to file a petition for approval of the

Agreement by this Board (see **Exhibit E**, attached hereto). NJAWC will execute the Agreement following approval by the BPU.

22. Pursuant to the Agreement, the purchase price for the System is \$525,000.00 (the “Purchase Price”).
23. The Transaction is subject to the fulfillment of several requirements, including approval of this Petition by the Board.

IV. THE TRANSACTION SHOULD BE APPROVED PURSUANT TO WIPA

24. This Transaction is an example of why WIPA exists.
25. The Township is simply financially unable to properly operate and maintain the System for the proper benefit of the Township’s residents.
26. The provisions of WIPA have been followed, consistent with state policy.

V. NJAWC CAN MEET THE NEEDS OF THE PEOPLE OF SHREWSBURY TOWNSHIP THAT THE TOWNSHIP CAN NOT MEET

27. Upon completion of the Transaction, the System will be integrated into the NJAWC system and the customers will realize the benefits of being part of a large, regional water and wastewater utility with a strong track record of providing high quality customer service. New Jersey American Water already provides water service to the majority of the Township.
28. The need to comply with increasingly stringent environmental standards while also rehabilitating and replacing aging water and wastewater system infrastructure has created major demands for capital investment by water and wastewater systems.
29. The financial resources and backing of NJAWC enhances its ability to access capital markets, which will be a benefit to the System’s customers in the rehabilitation and replacement of infrastructure and compliance with environmental laws and regulations.

30. The current and future customers of the System will benefit from becoming part of the American Water system. American Water's size and scale position NJAWC well to be able to address the needs of the former System customers well into the future.
31. It is often difficult for small, municipal utilities to effectively access the capital and expertise necessary to plan for and respond to the broad range of issues that face the industry. NJAWC will be able to effectively address the water needs of the customers of the System upon transfer of the system and into the future.
32. As customers of NJAWC, the customers of the System will also receive the benefit of industry standard practices in the areas of planning, research, environmental compliance, customer service, finance, risk management, operations and service delivery, and management.
33. NJAWC will provide the former System customers with an expanded range of customer services, such as full customer call center services, Monday through Friday, 7am- 7pm, and 24/7 emergency call center services, which these customers do not currently have available.
34. In addition to the specific system-related benefits previously noted, NJAWC has a long history of service in the communities where it operates. The philosophy of corporate responsibility to the communities served is at the core of NJAWC's culture, and that philosophy will be extended to the System post-Closing.
35. In short, NJAWC can provide the customers of the System with the requirements for safe, adequate and proper utility service that the DEP found the Township cannot provide. That is the very reason for the enactment of WIPA and specifically, Emergent Condition No. 4.

VI. THE BOARD SHOULD DETERMINE THAT THE PURCHASE PRICE IS REASONABLE

36. WIPA sets forth the conditions pursuant to which the Purchase Price shall be considered reasonable.

The rent or sale price shall be deemed reasonable if it meets the following conditions: (a) The rent or sale price is sufficient to defease the debt of the owner; and either (b) (i) The rent or sale price is within the range of any appraisals obtained with respect to the long-term lease or sale of the water or wastewater assets; or (ii) If there is little or no established rate base for the water or wastewater assets, the rent or sale price is reasonably comparable to a proxy rate base equivalent to the rate base of the designated respondent.⁴

37. The Township does not have any debt associated with the System.

38. On June 3, 2024, Weinert Appraisal and Depreciation Services, LLC (“WADS Consultants”) issued an appraisal valuing the System at \$561,830 (the “Appraisal”). (See **Exhibit F**, attached hereto).

39. The purchase price of \$525,000 meets the requirements of WIPA to be deemed reasonable.

VII. REASONABLE TRANSACTION COSTS

40. NJAWC’s Transaction Costs are prudent and reasonable and therefore may be recovered by NJAWC in rates.

41. To date, NJAWC has incurred \$14,125.00 in Transaction Costs consisting of the cost to obtain the appraisal. NJAWC may incur additional Transaction Costs between the filing of the within petition and closing.

⁴ N.J.S.A. 58:30-7c (2).

42. NJAWC requests that its Transactions Costs be deferred by NJAWC for recovery, as part of rate base, in a future base rate case.

VIII. THE BOARD SHOULD DECIDE THIS MATTER WITHIN NINETY DAYS

43. Pursuant to WIPA this matter must be decided within ninety (90) days, pursuant to N.J.S.A. 58:30-7c(1).

44. Communications in this matter on behalf of Petitioner should be addressed to the following:

Stephen R. Bishop VP and General Counsel
New Jersey-American Water Company, Inc.
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Camden, New Jersey 08102
stephen.bishop@amwater.com
(856) 955-4877


Gene J. Anthony, Esq.
Law Offices of Gene J. Anthony
48 South St, Eatontown, NJ 07724
gantpol@aol.com
(732) 542-3320

IX. CONCLUSION

45. For the reasons stated herein, Petitioner respectfully requests that this Honorable Board:

(1) approve the Agreement pursuant to the provisions of WIPA; (2) determine that the Purchase Price pursuant to the Agreement is reasonable and thus the rate base of the System as of the approval; (3) determine that the Transaction Costs are reasonable and may be deferred for recovery in a future base rate case; and (4) grant such other approvals as may be necessary to complete the proposed Transaction.

New Jersey-American Water Company, Inc.

By:  _____
Stephen R. Bishop

Dated: October 7, 2024

VERIFICATION

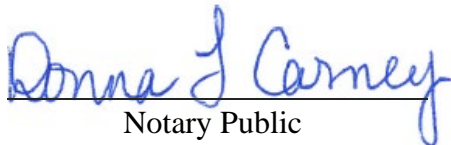
I, Jamie Hawn, of full age, being duly sworn, according to law, deposes and says:

1. I am the Director of Rates and Regulatory of New Jersey-American Water Company, Inc., the Petitioner, and am authorized to make this Verification on behalf of said Petitioner.
2. I have read the contents of the foregoing Petition and hereby verify that the statements therein contained are true and accurate to the best of my knowledge and belief.



Jamie Hawn
Director, Rates & Regulatory

Sworn and subscribed before me
this 7th day of October, 2024



Notary Public

DONNA L. CARNEY
NOTARY PUBLIC
STATE OF NEW JERSEY
MY COMMISSION EXPIRES MAY 24, 2028

Resolution #2023-65

**RESOLUTION ACCEPTING AND ADOPTING THE EMERGENT CONDITION
REPORT OF JUNE 13, 2023 PRESENTED BY
COLLIERS ENGINEERING AND DESIGN AND NW FINANCIAL GROUP, LLC**

WHEREAS, under the Water Infrastructure Protection Act, municipalities that have water systems that meet the specific criteria prescribed by law may request a Certification of Emergent Conditions from the NJDEP, allowing the municipality to move forward with the sale of its water system without a referendum; and

WHEREAS, the Township Committee of the Township of Shrewsbury adopted a resolution commencing the procedure for the sale of the Shrewsbury Township water system under the Water Infrastructure Protection Act, and authorized William White, Engineering Consultant for Colliers Engineering and Design to supervise the process. The aforesaid resolution was adopted on May 18, 2021; and

WHEREAS, as part of the aforesaid process, Colliers Engineering and Design, William White and Jordan Volk, PE, PMA, presented a report to the Township Committee during a special meeting on October 26, 2021 establishing the emergent conditions allowing for the sale of the water system in Shrewsbury Township pursuant to the Water Infrastructure Protection Act, along with system maintenance challenges, system age challenges, valuation of system replacement, the water system value and impact of the proposed transaction on residents; among other factors in both a presentation and a report during a public hearing with available public participation. In addition, the asset Valuation Assessment was presented by Dennis Enright from NW Financial Group.

WHEREAS, by Resolution 2022-62, adopted May 17, 2022 the Township Committee authorized the solicitation through the fair and open process for professional services for the financial analysis of the water system through Requests for Proposals as a professional service; and

WHEREAS, the Township advertised a Request for Proposals and received one proposal from NW Financial Group, LLC, dated June 28, 2022, at a flat cost of \$15,000.00; and

WHEREAS, it was the recommendation of the Township Engineer and the Township Attorney that the contract for financial services be awarded to NW Financial Group, LLC, located at 3 Hudson Place, 3rd Floor, Hoboken, New Jersey 07030; and

WHEREAS, the Township Committee hereby authorized a contract by Resolution 2022-79, with NW Financial Group, LLC of Hoboken, New Jersey, per its proposal of June 28, 2022 to provide an independent financial advisory service for water evaluation and impact study for the Township of Shrewsbury at a flat fee of \$15,000.00; unless additional services are requested, in which case the services would be provided at an hourly rate of \$250.00 per hour; exclusive of costs and disbursement and,

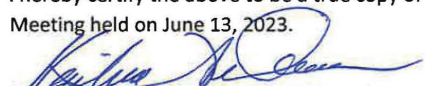
WHEREAS, the Mayor, as authorized, executed the aforesaid Contract with NW Financial Group, LLC prepared by the Township Attorney or reviewed by the Township Attorney for the above referenced services; and,

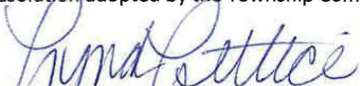
BE IT FURTHER RESOLVED, that the Chief Financial Officer certified the availability of funds for this contract, a true copy of said Certification of Availability of Funds can be reviewed in the Clerk’s Office of the Township of Shrewsbury, and is financed by bonding adopted for the sale of the water system by Shrewsbury Township.

NOW, THEREFORE BE IT RESOLVED, by the Mayor and Township Committee of the Township of Shrewsbury, County of Monmouth, and State of New Jersey, that the governing body hereby accepts and adopts the previous Emergent Condition Report and presentation made by Colliers Engineering and Design certifying that the emergent conditions exist as described in the report and NW Financial Group, LLC on June 13, 2023, the Township of Shrewsbury approves of the Asset Valuation Assessment Report presented by NW Financial Group. The Township of Shrewsbury intends to sell its water assets to a capable public or private entity to address the emergent conditions and to operate and maintain the system, a true copy of which is available in the Clerk’s Office of Shrewsbury Township.

Name	Motion	Second	Ayes	Nays	Abstain	Absent
PUHAK		X	X			
LETTICE	X		X			
JENNINGS						X

I hereby certify the above to be a true copy of the resolution adopted by the Township Committee at the Regular Meeting held on June 13, 2023.


Katrina L. Thornton, CMR
Acting Municipal Clerk


Lynda Lettice
Deputy Mayor



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER RESOURCE MANAGEMENT
OFFICE OF THE ASSISTANT COMMISSIONER

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PHILIP D. MURPHY

Governor

SHEILA Y. OLIVER

Lt. Governor

SHAWN M. LATOURETTE

Commissioner

July 21, 2023

Township of Shrewsbury
Municipal Office
1979 Crawford Street
Shrewsbury Township, NJ 07724
Honorable Lester Jennings
Via Email Only: ljennings@townshipofshrewsbury.com

Subject: Water Infrastructure Protection Act – The Township of Shrewsbury
Emergent Condition(s) Certification and Supporting Information
New Jersey Department of Environmental Protection - Determination

Mayor Jennings:

The purpose of this letter is to provide the Department of Environmental Protection's (Department) determination regarding the Township of Shrewsbury (Township) Emergent Condition Certification, in accordance with the Water Infrastructure Protection Act (WIPA), N.J.S.A. 58:30-1 et seq. In furtherance of its certification and consistent with WIPA's requirements, the City submitted Resolution No. 2023-65, dated June 13, 2023, certifying that Emergent Conditions exist. The Township also provided, and the Department reviewed, additional supporting information and documents, including but not limited to, the "Emergent Condition Report – Water System Sale via the Water Infrastructure Protection Act, Township of Shrewsbury, Monmouth County, New Jersey," report prepared by Colliers and dated September 21, 2021, in support of WIPA's Emergent Condition No. 4 (lack of historical investment, repair, or maintenance) and Emergent Condition No. 5 (lack of financial, technical, or managerial capacity) and "Final Report, Township of Shrewsbury New Jersey, Water System Asset Valuation," report prepared by NW Financial Group, LLC, dated October 15, 2022.

Based upon a review of the information provided, and after consultation with the New Jersey Department of Community Affairs (DCA) the New Jersey Infrastructure Bank (I-Bank), and New Jersey Board of Public Utilities (BPU) staff members, the Department approves the Township's Emergent Condition Certification as to Emergent Condition No. 4 but denies the Township's Emergent Condition Certification as to Emergent Condition No. 5. The basis for this determination is below.

Regarding Emergent Condition No. 4, the Department has determined that the Township's certification and supporting information, as well as Department-led inspections, demonstrate a lack of historical investment, repair, and maintenance as provided at N.J.S.A. 58:30-5(b)(4). In 2020, the Department became aware that Shrewsbury Township potentially owned and was responsible for operating a water distribution system in the Alfred Vail Mutual Association (AVMA) portion of Shrewsbury Township that was not registered as a public community water system. Subsequent discussions with New Jersey American Water (NJAW), indicated that although they sold the treated water to Shrewsbury Township, they did not own, operate, or maintain any of the water mains in that section. There is one meter between NJAW and AVMA, who in turn bills the cost of water on a pro-rated basis to each of its 265 owners. The Department made the determination that Shrewsbury Township/Alfred Vail Mutual Association was a public community water system and notified the Township on February 26, 2021. As stated in the Emergent Conditions report, the Township did not have a licensed operator until July 2020, and as a result, no maintenance of any sort was conducted prior to that date, including but not limited to, water main replacement since the 1940 installation, hydrant flushing, or valve exercising. The Emergent Conditions report also recommends that given the age, lack of maintenance, and frequent main and service line breaks/leaks, the entire system should be replaced.

Regarding Emergent Condition No. 5, the Department has determined that the Township's certification and supporting information does not demonstrate a lack of financial, technical, or managerial capacity to adequately address any of the foregoing on a sustainable basis or own and operate the system in a way that supports economic activity in the municipality on a sustainable basis, as provided at N.J.S.A. 58:30-5.b(5). While the NW Financial Group Asset Valuation Report alludes to the Township's lack of financial capacity to address the system replacement cost, which was estimated at \$1.97 million in the Emergent Condition Report, it incorrectly quantifies this lack of financial capacity and omits key information. Shrewsbury Township's current outstanding net debt is \$949,622.70, or 1.515% of their average equalized valuation. The Township's total borrowing capacity is 3.5% of three-year average valuation, or \$2,194,191.66, meaning the Township's remaining borrowing capacity is \$1,244,568.96 (debt limit minus existing net debt). The Asset Valuation Report incorrectly reported all debt capacity information for the Township. While a municipality that exceeds its statutory debt limit must have borrowings generally approved by the Local Finance Board, the Department notes that N.J.S.A. 40A:2-7 excludes certain types of debt from counting toward a municipality's debt limit. While the Local Finance Board generally does discourage municipalities from exceeding their statutory debt limits, the Board does look at the particular facts and circumstances of each application. Additionally, this report failed to explore the option of the Township creating its own self-liquidating water utility. Pursuant to N.J.S.A. 40A:2-7.h and 40A:2-44, debt from a self-liquidating utility is deducted from a municipality's gross debt calculation and would not count toward the municipality's debt limitation. This means that the rates and fees charged to the AVMA would need to generate sufficient revenue to at least meet the debt service and other costs of operating the water utility. The independent financial report also failed to provide an analysis of what rate would need to be charged to the AVMA if the Township were to create a self-liquidating water utility, along with the corresponding impact on each household in the AVMA. Additionally, though the Emergent Condition report alludes to the lack of technical and managerial capacity noting the lack of a licensed operator until 2020, neither report adequately addressed the lack of existing technical and managerial capacity and/or the ability to obtain that capacity.

Additionally, it should be noted that the Township of Shrewsbury would have qualified: under Emergent Condition 1, "the system is located in an area designated by the Department of Environmental Protection as an Area of Critical Water Supply Concern I." N.J.S.A. 58:30-5.b(1) states that a system must be located in the Critical Area, but does not specify whether or not the system must have sources in the

Critical Area. However, the Township of Shrewsbury did not certify this Emergent Condition, and as such has not satisfied that procedural prerequisite.

In summation, in accordance with N.J.S.A. 58: 30-5.b and e, the Department approves the Township of Shrewsbury's certification as to the existence of Emergent Condition No. 4. In accordance with N.J.S.A. 58:30-5.f, the Township must publish notice of this approval if it chooses to proceed with the sale or long-term lease of its water or wastewater assets to a capable private or public entity. The notice must state that the emergent condition certification is in anticipation of a long-term lease or sale of water or wastewater assets to capable private or public entity and must be published on the Township's official website and at least once in one or more newspapers circulating in the Township. The notice must prominently state that a petition may be filed within 45 days of the publication of the notice to require a referendum before a resolution authorizing the long-term lease or sale of water or wastewater assets may take effect. For information regarding additional steps in the process, visit the [WIPA website](https://dep.nj.gov/wipa/) (<https://dep.nj.gov/wipa/>).

Nothing herein shall be construed to satisfy any other obligations under WIPA or any other applicable laws.

If you have any questions, please feel free to contact Chelsea Brook of my staff at Chelsea.Brook@dep.nj.gov.

Sincerely,

Patricia Gardner
Assistant Commissioner
Water Resource Management

cc:

[Katrina Thornton](#), Acting Municipal Clerk,
[Nicole Louca](#), Engineer, Colliers Engineering & Design
[Michael Kammer](#), Director, Division of Water, Board of Public Utilities
[Terel Klein](#), Deputy Attorney General, Division of Law
[Jason R. Martucci](#), Esq., Division of Local Government Services, NJ Department of Community Affairs
[Kristen Heinzerling](#), Deputy Attorney General, Division of Law
[Elizabeth Delahunty](#), Deputy Attorney General, Division of Law
[Barbara Geary](#), Director, Office of the State Comptroller
[Carlton Dudley](#), Director, Division of Water and Land Use Enforcement
[Patricia Ingelido](#), Director, Division of Water Supply & Geoscience
[Ryan Knapick](#), Advisor, Water Resource Management
[Keiona Miller](#), Director, Office of Local Government Assistance
[David Zimmer](#), Executive Director, New Jersey Infrastructure Bank

Township of Shrewsbury
Resolution #2023- 91

RESOLUTION OF THE TOWNSHIP OF SHREWSBURY, COUNTY OF MONMOUTH, STATE OF NEW JERSEY, SEEKING AUTHORIZATION TO ASK NJAWC TO RESPOND TO A REQUEST FOR A RFP FOR THE PURCHASE OF THE TOWNSHIP WATER SYSTEM

WHEREAS, the Township of Shrewsbury is in the process of selling its water system; and

WHEREAS, the Township of Shrewsbury requested Qualifications which were received on October 18, 2023 and,

WHEREAS, the only RFQ submitted was by New Jersey American Water company and the Township Engineer finds them more than qualified and now request a proposal for the purchase of the system; and,

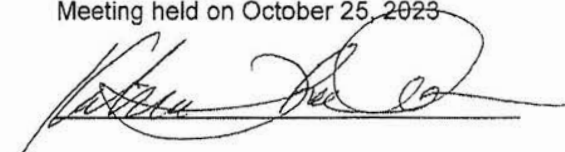
WHEREAS, the Township of Shrewsbury is seeking authorization to ask NJAWC to respond to a Request for Proposal to purchase the water system; and,

WHEREAS, The Proposal document once received will be subject to review by BPU which could take up to 90 days.

NOW, THEREFORE, BE IT RESOLVED, by the governing body of the Township of Shrewsbury, County of Monmouth, State of New Jersey That a certified copy of this resolution be provided to the Chief Financial Officer and Township Engineer.

Name	Motion	Second	Ayes	Nays	Abstain	Absent
Puhak		X	X			
Lettice	X		X			
Jennings			X			

I hereby certify the above to be a true copy of the resolution adopted by the Township Committee at the Meeting held on October 25, 2023

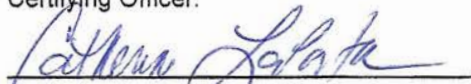


Katrina Thornton
Acting Municipal Clerk



Lester Jennings
Mayor

Certifying Officer:



Catherine LaPorta
Chief Financial Officer

**TOWNSHIP OF SHREWSBURY
RESOLUTION #2024-36**

RESOLUTION FOR DESIGNATION OF QUALIFIED RESPONDENT

WHEREAS the Township of Shrewsbury desires to enter into negotiations to establish fair cost for the sale of its water system; and

WHEREAS, the Township has previously identified New Jersey American Water as a qualified respondent and has prepared and issued a request for proposal to New Jersey American Water in November 2023; and

WHEREAS the Township received a proposal from New Jersey American Water on December 18, 2023; and

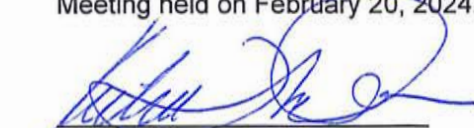
WHEREAS, in accordance with the requirements of P.L.2015, c.18 (C.58:30-6), the Township reviewed the proposal, taking into consideration the evaluation criteria set forth in the request for proposals and as specified under P.L. 2015 c.18 C.58:30-6(b) and found the following as critical items which are advantageous to the public:

- Cash payment for the water assets.
- A capital improvement plan, including monetary commitment and complete replacement of distribution infrastructure.
- Transition of responsibility under the Water Quality Accountability Act to New Jersey American Water (NJAW), which will stabilize and improve resiliency of the Township's aging water infrastructure.
- Operational and regulatory relief allowing the Township to focus on other priorities and reducing the environmental and financial risk to the Township.
- Customer financial assistance programs for qualifying customers.
- Ability to respond to emergency conditions and location of critical staff and regional offices.
- Commitment to restore roads in the Township including full width mill and overlay in any location where water main will be replaced.
- Proposed rate structure

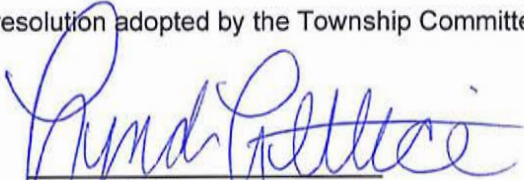
NOW, THEREFORE BE IT RESOLVED, by the Township Committee of the Township of Shrewsbury, County of Monmouth, State of New Jersey, that the Mayor is hereby authorized to designate New Jersey American Water as the qualified respondent whose proposal is most advantageous to the public.

Name	Motion	Second	Ayes	Nays	Abstain	Absent
PUHAK		X				
LETTICE	X					
JENNINGS						X

I hereby certify the above to be a true copy of the resolution adopted by the Township Committee at the Meeting held on February 20, 2024.



Katrina Thornton, CMR
Acting Municipal Clerk



Lynda Lettice
Deputy Mayor

TOWNSHIP OF SHREWSBURY

RESOLUTION #2024 -69

**AUTHORIZE THE TOWNSHIP OF SHREWSBURY TO SELL THE TOWNSHIP OF SHREWSBURY
WATER SYSTEM TO NEW JERSEY AMERICAN WATER COMPANY, INC**

WHEREAS, the Township of Shrewsbury has entered into negotiations with New Jersey-American Water Company, Inc. ("New Jersey American Water") for the sale of its water system assets pursuant to the New Jersey Water Infrastructure Protection Act, N.J.S.A. 58:30-1 et seq. (the "Act"); and

WHEREAS, the Township of Shrewsbury and New Jersey American Water have agreed to the terms of an agreement whereby the Township of Shrewsbury will sale and NJAW will acquire the water system assets pursuant to the Act. (the "Agreement"); and

WHEREAS, the Mayor and Committee of the Township of Shrewsbury have concluded that the sale is in the best interest of the citizens of the Township of Shrewsbury; and

WHEREAS, the Mayor and Committee have further concluded that the sale shall enhance the health, safety and welfare of the citizens of the Township of Shrewsbury; and

WHEREAS, New Jersey American Water is a regulated public utility corporation of the State of New Jersey and is hereby authorized to assist the Township of Shrewsbury in submitting the Agreement to the Board of Public Utilities for approval on behalf of the Township of Shrewsbury; and

WHEREAS, the Township of Shrewsbury will need to submit the proposed use of the purchase price to the Director of the Department of Community Affairs for approval; and

WHEREAS, pursuant to N.J.S.A. 40:48-2, the Township of Shrewsbury has authority to execute resolutions and ordinances for the general health, welfare and public safety of its residents.

NOW, THEREFORE BE IT RESOLVED, by the Committee of the Township of Shrewsbury, that the Township Clerk and the Mayor, in consultation with the Township Attorney and its professionals, and with the assistance of New Jersey American Water, is authorized to submit the Agreement to the BPU for approval on its behalf; and upon approval of the Agreement, the Mayor shall be authorized to execute the Agreement substantially in the form on file with the Township Clerk with such other changes, insertions and amendments as deemed necessary by the Township Attorney in consultation with Township staff and professionals; and

BE IT FURTHER RESOLVED, the Township Clerk, Mayor and other Township officials shall be authorized to execute other necessary documents to effectuate the sale of the water system assets consistent with this resolution; and the Township engineer shall be authorized to submit the proposed use of the purchase price to the Director of the Department of Community Affairs for approval.

NAME	Motion	Second	Ayes	Nays	Abstain	Absent
PUHAK	X		X			
LETTICE						X
JENNINGS		X	X			

I hereby certify the above to be a true copy of the resolution adopted by the Township Committee at the Meeting held on July 9, 2024.

Attest:


Katrina Thornton, CMR
Acting Municipal Clerk


Lester Jennings
Mayor

**Township of Shrewsbury, New Jersey's
Water Distribution System**

**Fair Market Value Appraisal Report
As of March 31, 2024
for
New Jersey American Water Company**

**WADS Consultants
Weinert Appraisal and Depreciation Services, LLC
8555 West Forest Home Avenue Suite 201
Greenfield, Wisconsin 53228
Office: 414-529-5755
Cell: 414-698-8371
E-Mail: weinertj@auswest.net**

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SUPPORTING EXHIBITS AND WORKPAPERS

- o VALUATION SUMMARY (TAB)
- o COST APPROACH (TAB)
- o INCOME APPROACH (TAB)
- o MARKET APPROACH (TAB)
- o COST INDICES
- o DEPRECIATION & OBSOLESCENCE
- o COST OF CAPITAL / REQUIRED RETURN
- o VALUE LINE INVESTMENT SURVEY
- o ASSET PURCHASE AGREEMENT BETWEEN TOWNSHIP OF SHREWSBURY AND NEW JERSEY AMERICAN WATER COMPANT
- o SUPPORT DATA
 - COLLIERS ENGINEERING & DESIGN’S SHREWBURY NJ EMERGENT CONDITION REPORT
 - NW FINANCIL GROUP, LLC TOWNSHIP OF SHREWSBURY, NJ WATER SYSTEM ASSET VALUATION

June 3, 2024

New Jersey American Water
Camden, New Jersey

WADS Consultants
Weinert Appraisal and Depreciation
Services, LLC

8555 West Forest Home Avenue
Suite 201
Greenfield, WI 53228
Telephone 414-529-5755
Fax 414-529-5750
Cell 414-698-8371
E-Mail weinertj@auswest.net

RE: Fair Market Value Appraisal of the Township of Shrewsbury, NJ's Water Systems

Enclosed is WADS Consultants' fair market value appraisal results for our appraisal of the Township of Shrewsbury, NJ's Water Systems as of March 31, 2024, prepared for New Jersey American Water. The report was prepared based on the 2024-2025 Uniform Standards of Professional Practices (USPAP) and is intended to meet the criteria established by that portion of Title 58 of the New Jersey Revised Statutes (NJ RS) known as the "Water Infrastructure Protection Act" (hereafter referred to as WIPA") regarding the valuation of water and/or wastewater assets. The intended users of this appraisal are New Jersey American Water and the New Jersey Board of Public Utilities (NJ BPU).

Based on our appraisal the Fair Market Value of Township of Shrewsbury, NJ's Water Systems water and wastewater systems' property, plant, and equipment operating as rate regulated utilities

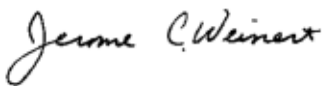
is \$561,830 determined based on the cost, income, and market approaches to value, as detailed in the following table:

Township of Shrewsbury, NJ			
Water Distribution System			
Investor-Owned Utility			
As of March 31, 2024			
Fair Market Value Appraisal			
Appraisal Approach	Investor-owned Utility	Weight	Wtd Valuation Indications
Cost Approach			
Inventory of Assets			
Original Cost (\$OC)	194,104		
Depreciated Original Cost (\$OCLD)	140,821		
Cost Approach of all assets Conclusion	140,821		
Replacement Cost			
Replacement Cost New (COR)	2,659,672		
Depreciated Replacement Cost New (CORLD)	\$ 898,152		
External or Economic Obsolescence	-35.00%	AUS Input	
Market Value of Tangible Assets	\$ 583,799		
Cost Approach of all assets Conclusion	583,799		
Cost Approach Conclusion	583,799	33.33%	194,600
Income Approach			
	584,175		
Income Approach Conclusion	584,175	33.33%	194,725
Market Approach			
Market Comparables (to)			
Price per Customer	878,740		
Price per Mile	213,734		
Gross Revenue Multiplier	517,515		
EBITDA Multiple	283,047		
Market Approach Conclusion	517,515	33.33%	172,505
Appraisal Conclusion	\$ 561,830	100%	561,830
Conclusion (cost approach)	\$ 583,799		

As the purpose of this appraisal was to fulfill the requirements of WIPA in the establishment of value for rate making of the Township of Shrewsbury, NJ's water system property, plant and equipment the appraisal's conclusion of \$561,830 is consistent with the purpose of this appraisal.

Respectfully Submitted,
WADS Consultants
June 3, 2024

By:


Jerome C. Weinert, ASA, P.E., CDP Principal and Owner

ASA: Accredited Senior Appraiser in the Machinery and Equipment (Public Utilities) discipline of the American Society of Appraisers
P.E.: Registered Professional Engineer State of Wisconsin
CDP: Certified Depreciation Professionals in the Society of Depreciation Professionals

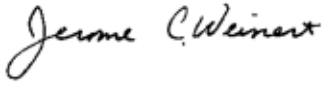
APPRAISAL CERTIFICATION
for the Fair Market Appraisal of
The Township of Shrewsbury, NJ's Water System
As of March 31, 2024
Prepared for
New Jersey American Water Company

WADS Consultants, certifies that, to the best of its knowledge and belief:

- The statements of fact contained in this report are true and correct.
- Over the last three-year period, WADS Consultants has not appraised these properties.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- Neither WADS Consultants nor its professional staff has any present or prospective interest in the property that is the subject of this report and has no personal interest with respect to the parties involved.
- Neither WADS Consultants nor its professional staff has any bias with respect to the property that is the subject of this report or to the parties involved.
- Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice 2024-2025 Edition.
- The signers of this report have not made a personal inspection of the property that is the subject of this report. Much of the property being appraised is underground and could not be observed; rather than relying on physical inspections to observe the condition of the property reliance was placed on the property's age and its expected service life.
- No individuals provided any significant professional assistance to the persons signing this report.

WADS Consultants
June 3, 2024

By:


Jerome C. Weinert, ASA, P.E., CDP Principal and Director

ASA: Accredited Senior Appraiser in the Machinery and Equipment (Public Utilities) discipline
of the American Society of Appraisers
P.E.: Registered Professional Engineer State of Wisconsin
CDP: Certified Depreciation Professions in the Society of Depreciation Professionals

PURPOSE AND SCOPE OF WORK

Enclosed is WADS Consultants' fair market value appraisal results for our appraisal of Shrewsbury Township, NJ's water distribution systems (System) as of March 31, 2024, prepared for New Jersey American Water Company. The report was prepared based on the 2024-2025 Uniform Standards of Professional Practices (USPAP) and is intended to meet the criteria established by that portion of Title 58 of the New Jersey Revised Statutes (NJ RS) known as the "Water Infrastructure Protection Act" (hereafter referred to as WIPA") regarding the valuation of water and/or wastewater assets. The intended users of this appraisal are New Jersey American Water and the New Jersey Board of Public Utilities (NJ BPU).

The value established in this appraisal was based on the definition of Market Value as:

"The most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress." The Appraisal of Real Estate, 14th Edition, page 58.

In conducting this appraisal, we utilized several sources of data:

- Colliers Engineering & Design Emergent Condition Report Water System Sale via the Water Infrastructure Protection Act September 21, 2021
- NW Financial Group, LLC' Final Report Township of Shrewsbury New Jersey Water System Asset Valuation October 15, 2022
- The Handy-Whitman (water industry) Index of Public Utilities Construction Costs for northeastern United States, AUS Consultant General Plant Cost Indexes for the period 1912 through January 1, 2024.

In preparing this fair market value appraisal of the Systems' property, plant and equipment, and its operations: the cost, income, and market approaches to value were considered. A detailed explanation of each approach to value is included below in the section "Appraisal Procedures and Results"

WATER/WASTEWATER INDUSTRY NATIONALLY AND IN NEW JERSEY
AND
SHREWSBURY, NJ'S WATER DISTRIBUTION SYSTEM FACILITIES

Water/wastewater Industry

The water and wastewater industry in the United States consists of both municipal authorities and investor-owned companies. Of the investor owned there are nine which are large enough to be tracked by Value Line Investment Surveys, of which, two are major players in the northeast portion of the United States, American Water Works Company, Inc. and Aqua America, Inc. (on February 3, 2020, Aqua's name changed to Essential Utilities, Inc.) Also serving the northeast portion of the US is Veolia (formerly Suez) which serves NJ and NY. American and Aqua have been particularly active in the acquisition of municipal water and wastewater systems.

New Jersey Water / Wastewater Industry

The water and wastewater industry in New Jersey also consists of both municipal and investor-owned systems. Over last several years the need for infrastructure improvements has led the New Jersey legislature to pass legislation facilitating the acquisition of municipal water and/or wastewater systems by private investor-owned rate regulated companies such as American Water and Aqua America. The purpose of this appraisal was to fulfill the requirements of WIPA in the establishment of fair market value for rate making of the Shrewsbury, NJ's water distribution systems' property, plant and equipment. As the cost approach work papers detail our value conclusion by National Association of Regulatory Utility Commissioners' (NARUC) Uniform System of Accounts (USOA) for the water and wastewater industry account classifications and the installation year of the property this detail can be used to allocate the appraisal conclusion to establish the booked value for future accounting and rate making.

Shrewsbury, NJ (NJ)'s Water Distribution System Facilities,¹

¹ Extracted from NW Financial Group, LLC' Final Report Township of Shrewsbury New Jersey Water System Asset Valuation October 15, 2022

Existing Water Distribution System

The Water System is owned and operated by the Township of Shrewsbury. The System consist of:

- The systems customers consist of 265 household; the system's customers are metered
- The system consists of 0.634 miles of 8-inch asbestos-cement-pipe² (ACP) diameter water mains
- Treated water (9.2 million gallons) is purchased from New Jersey America.

The Township of Shrewsbury is located in Monmouth County New Jersey. Shrewsbury Township currently has a census population estimated at 1,081 people in 583 households The water system serves residents in the 265-unit cooperative called Alfred Vail Mutual Association (AVMA). AVMA was built as military housing for the US Army Signal Corp in approximately 1917. New Jersey American Water already provides water service for the portion of the Township not contained within AVMA.

² Extracted from Colliers Engineering & Design Emergent Condition Report Water System Sale via the Water Infrastructure Protection Act September 21, 2021.

APPRAISAL PROCEDURES AND RESULTS

Enclosed is WADS Consultants' fair market value appraisal results for our appraisal of the Township of Shrewsbury, NJ's Water Systems as of March 31, 2024, prepared for New Jersey American Water. The report was prepared based on the 2024-2025 Uniform Standards of Professional Practices (USPAP) and is intended to meet the criteria established by that portion of Title 58 of the New Jersey Revised Statutes (NJ RS) known as the "Water Infrastructure Protection Act" (hereafter referred to as WIPA") regarding the valuation of water and/or wastewater assets. The intended users of this appraisal are New Jersey American Water and the New Jersey Board of Public Utilities (NJ BPU).

The value established in this appraisal was based on the definition of Market Value as:

"The most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress." The Appraisal of Real Estate, 14th Edition, page 58.

In arriving at our opinion of value of the Systems' property, plant, and equipment as it is operated as an investor-owned rate regulated utility the cost, income, and market approaches to value were considered.

Cost Approach - The philosophy in the cost approach to value is that the maximum value of a property's tangible assets is established by the cost to acquire or build a similar property. In this appraisal, the cost approach to value was analyzed using reproduction/replacement cost approach.

Reproduction cost and replacement cost are defined as:

Reproduction cost – "Reproduction cost is the estimated cost to construct, as of the effective appraisal date, an exact duplicate or replica of the building [property] being appraised, insofar as possible, using the same materials, construction standards, design, layout, and quality of workmanship and embodying all the

deficiencies, super-adequacies, and obsolescence of the subject improvements [property].”³

Replacement cost – “Replacement cost is the estimated cost to construct, as of the effective appraisal date, a substitute for the building [property] being appraised using contemporary materials, standards, design and layout. When this cost basis is used, some existing obsolescence in the property may be cured. Replacement cost may be the only alternative if reproduction cost cannot be estimated”⁴

In the water and wastewater industry the property’s reproduction costs and replacement costs are quite similar for most categories of water and wastewater plant with the possible exception of mains. In this appraisal we have analyzed the installed cost of mains of varying materials and sizes (diameters) in order to develop a replacement cost factors to apply to the reproduction cost of the non-plastic mains such as ductile and cast-iron mains and vitrified clay mains in order to estimate the replacement cost new of those mains using plastic pipe materials.

Reproduction Cost New - The trended original cost method was utilized in preparing the reproduction cost new. “Trending is a method of estimating a property’s reproduction cost new in which an *index* or *trend factor* is applied to the property’s *historical costs* to convert the known historical costs into an indication of current (appraisal date) costs. Simply put, trending reflects the movement of price over time.”⁵ In the trended original cost method, Shrewsbury’s investment in water plant and equipment is restated to costs reflective of the appraisal date, by the application of cost trends to the property’s original investment. WADS Consultants utilized the appraisal results developed by NW Financial Group, LLC as the starting point of the Cost Approach. Utilizing this inventory WADS Consultants developed the Systems’ original cost less depreciation (OCLD) and replacement cost new less depreciation (CORLD) in property, plant and equipment on March 31, 2024 (Cost Approach tab).

The cost trends were applied to each of the Systems’ various investment categories (NARUC plant accounts) by original year of placement for that investment. The cost indexes used in these studies were the Handy-Whitman Index of Public Utility Construction Costs for the water industry in the northeastern region of the United States which includes the State of New Jersey.

³ The Appraisal of Real Estate, 14th Edition. pages 569-570

⁴ Ibid, page 570

⁵ Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets, Third Edition. Page 50

New Jersey American Water Company (NJAWC)												
Township of Shrewsbury, NJ												
Water Distribution System												
Water Distribution System												
Investor-Owned Utility												
March 31, 2024												
Development of Replacement Cost New Less Depreciation (CORLD)												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(15)	(16)	(17)	
Township of Shrewsbury, Monmouth County, New Jersey												
Water Distribution System												
ITEM				Unit Costs	Unit	Replacement Cost New (RCN)	Installation Date	Cost Index	Cost Index	Cost Translator	Replacement cost New	
										8/1/2021 to 3/31/2024		
NUMBER DESCRIPTION UNIT UNIT PRICE QUANTITY AMOUNT				8/1/2021		8/1/2021		8/1/2021		3/31/2024	3/31/2024	
Input	NW Financial Group (NWFG) Input	NWFG Input	NWFG Input	NWFG Input	NWFG Input	(5)*(6)	Input	Cost Index Lookp	Cost Index Lookp	(15)/(9)	(7)*(16)	
1	Clearing Site LS \$5,000.00 1 \$5,000.00	LS		5,000.00	1	5,000.00	1981.58	931.00	1185.00	1.273	6,365.00	
2	Test Pits CY \$25.00 400 \$10,000.00	CY		25.00	400	10,000.00	1981.58	931.00	1185.00	1.273	12,730.00	
3	Maintenance and Protection of Traffic LS \$5,000.00 1 \$5,000.00	LS		5,000.00	1	5,000.00	1981.58	931.00	1185.00	1.273	6,365.00	
4	Borrow Excavation, (If & Where Directed) CY \$25.00 1,500 \$37,500.00	CY		25.00	1500	37,500.00	1981.58	931.00	1185.00	1.273	47,738.00	
5	Hot Mix Asphalt 9.5 H64 Surface Course, 2" Thk. TON \$90.00 600 \$54,000.00	TON		90.00	600	54,000.00	1981.58	931.00	1185.00	1.273	68,742.00	
6	Hot Mix Asphalt 19 H64 Base Course, 4" Thk. TON \$90.00 1,200 \$108,000.00	TON		90.00	1200	108,000.00	1981.58	931.00	1185.00	1.273	137,484.00	
7	6" Thick, Dense Graded Aggregate, Base Course SY \$10.00 3,700 \$37,000.00	SY		10.00	3700	37,000.00	1981.58	931.00	1185.00	1.273	47,101.00	
8	Polymerized Joint Adhesive LF \$1.50 7,100 \$10,650.00	LF		1.50	7100	10,650.00	1981.58	931.00	1185.00	1.273	13,557.00	
9	Concrete Vertical Curb - 6" X 8" X 18" LF \$25.00 1,400 \$35,000.00	LF		25.00	1400	35,000.00	1981.58	931.00	1185.00	1.273	44,555.00	
10	Concrete Sidewalk, 4" thk. SY \$60.00 200 \$12,000.00	SY		60.00	200	12,000.00	1981.58	931.00	1185.00	1.273	15,276.00	
11	Concrete Driveway, Reinforced, 6" thick SY \$80.00 600 \$48,000.00	SY		80.00	600	48,000.00	1981.58	931.00	1185.00	1.273	61,104.00	
12	8" DIP Watermain (Complete and In Place) LF \$150.00 4,100 \$615,000.00	LF	70.5	150.00	4100	615,000.00	1981.58	931.00	1185.00	1.273	782,895.00	
13	8" Gate Valves, In New Main UNIT \$3,500.00 10 \$35,000.00	Unit	1550	3,500.00	10	35,000.00	1981.58	931.00	1185.00	1.273	44,555.00	
14	8" x 8" Connection to Existing Mains UNIT \$5,000.00 2 \$10,000.00	Unit		5,000.00	2	10,000.00	1981.58	931.00	1185.00	1.273	12,730.00	
15	12" x 8" Connection to Existing Main UNIT \$8,000.00 1 \$8,000.00	Unit		8,000.00	1	8,000.00	1981.58	931.00	1185.00	1.273	10,184.00	
16	Water Service Connections, Complete and In Place UNIT \$4,500.00 70 \$315,000.00	Unit	530	4,500.00	70	315,000.00	1981.58	931.00	1185.00	1.273	400,995.00	
17	Water Meters UNIT \$500.00 266 \$133,000.00	Unit		500.00	266	133,000.00	1981.58	931.00	1185.00	1.273	169,309.00	
18	Fire Hydrant Assemblies, Complete and In Place UNIT \$7,000.00 12 \$84,000.00	Unit	4500+117	7,000.00	12	84,000.00	1981.58	931.00	1185.00	1.273	106,932.00	
19	Traffic Striping LS \$2,500.00 1 \$2,500.00	LS		2,500.00	1	2,500.00	1981.58	931.00	1185.00	1.273	3,183.00	
20	Topsoil / Seeding / Mulch SY \$9.00 400 \$3,600.00	SY		9.00	400	3,600.00	1981.58	931.00	1185.00	1.273	4,583.00	
21	Fuel Price Adjustment LS \$2,000.00 1 \$2,000.00	LS		2,000.00	1	2,000.00	1981.58	931.00	1185.00	1.273	2,546.00	
22	Asphalt Price Adjustment LS \$2,000.00 1 \$2,000.00	LS		2,000.00	1	2,000.00	1981.58	931.00	1185.00	1.273	2,546.00	
	SUB TOTAL \$1,572,250.00					1,572,250.00					2,001,475.00	
	CONTINGENCIES - BONDING, DESIGN											
	AND CONSTRUCTION ADMIN. (25%) \$393,062.50		25%			393,062.50	1981.58	931.00	1185.00	1.273	500,369.00	
	TOTAL \$1,965,312.50					1,965,312.50					2,501,844.00	
	Recent Improvements											
	Water Main Repairs Belshaw Ave					17,792.77	6/22/2017	931.00	1185.00	1.273	22,650.00	
	Water Main Repairs 22 Barker Ave					8,149.76	8/15/2018	931.00	1185.00	1.273	10,375.00	
	Water Main Repairs 10 Barker Ave					18,008.82	8/8/2020	931.00	1185.00	1.273	22,925.00	
	Water Main Repairs 10 Barker Ave					26,151.56	8/9/2020	931.00	1185.00	1.273	33,291.00	
	Service Line Break Belshaw Ave						10/10/2021	931.00	1185.00	1.273	-	
	Service Line Break 18 Barker Ave						2/1/2021	931.00	1185.00	1.273	-	
	Water Main Repairs 22 Barker Ave					17,952.56	2/8/2021	931.00	1185.00	1.273	22,854.00	
	Water Main Repairs 24 Baker Ave 8"					13,688.16	4/16/2021	931.00	1185.00	1.273	17,425.00	
	Water Main Repairs 32 Baker Ave 8"					22,237.30	4/11/2021	931.00	1185.00	1.273	28,308.00	
	Subtotal Recent Improvement					123,980.93					157,828.00	
	Grand Total					2,089,293.43					2,659,672.00	

When these cost trend factors are applied to the mains reproduction cost new, the Systems' replacement cost new was determined to be \$2,659,672.

Replacement Cost New Less Depreciation - The replacement cost described above reflects the cost of new property; however, Shrewsbury's water system property is not new and has experienced normal depreciation and potentially functional and/or economic obsolescence. These various forms of depreciation are defined as follows:

Normal depreciation/deterioration, akin to physical deterioration, is “loss in value caused by wear, tear, age and use.”⁶

Functional obsolescence is “the loss in value or usefulness of a property caused by inefficiencies or inadequacies of the property itself, when compared to a more efficient or less costly replacement property that new technology has developed.”⁷

Economic, or external, obsolescence is defined as “a loss in value caused by factors outside a property”⁸ and is most often indicated by insufficient earning.

Based on our experience in regard to water and wastewater depreciation studies and our analysis of Shrewsbury’s water systems’ operating performance; we found that the Shrewsbury’s water utility’s property experiences normal depreciation but not any significant functional obsolescence; economic obsolescence is best evaluated after the results of the income and market approaches to values are determined (see Cost Approach Revisited).

The service lives used in the depreciation and functional obsolescence calculations were developed based on the property and its use, WADS Consultants’ experience in developing depreciation studies for the water and wastewater industries and the depreciation studies filed with New Jersey American Water Company (NJAWC) rate cases. With its recent rate case filings NJAWC filed depreciation studies in support of their depreciation service lives and associated depreciation expenses contained within their revenue requirements. The depreciation studies were prepared by Gannett Fleming Rate Consultants a recognized firm in the depreciation consulting area. WADS Consultants has reviewed the NJAWC study which is summarized in the following table:

⁶ The Dictionary of Real Estate Appraisal, 4th Edition

⁷ Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets, Second Edition. Page 67.

⁸ The Appraisal of Real Estate, 13th Edition, page 442.

New Jersey American Water Company Depreciation Parameters ¹ As of December 31, 2016											
Industry	NJAWC Account	Account Description	Survival and Retirement Characteristics	Service Life	Industry	AUS Account	AUS Account Description	Costing		Survival and Retirement Characteristics	Service Life
								Trend Factors	COR Factor		
Water	303.0	Land and Land Rights									
Water	303.2	Supply Land & Land Right	Non-Depreciable	N/A							
Water	303.3	Pumping Land & Land Right	Non-Depreciable	N/A							
Water	303.4	Treatment Land & Land Right	Non-Depreciable	N/A							
Water	303.5	Transmission & Distribution Land & Land Right	Non-Depreciable	N/A							
Water	303.6	General Land & Land Right	Non-Depreciable	N/A							
Water	304.0	Structures and Improvements (Str & Imp)									
Water	304.1	Source of Supply Str & Imp	R2.0	60							
Water	304.2	Pumping Str & Imp	S1.0	75	Water	304.2	Water Treatment & Wells Improvements	HWW-117	1.000	R4.0	45
Water	304.3	Treatment Str & Imp	S1.0	75	Water	304.3	Water Treatment & Wells Structures	HWW-117	1.000	R4.0	45
Water	304.4	Transmission & Distribution Str & Imp	R1.5	50	Wastewater	354.3	Wastewater Str & Imp - Pumping	HWW-18	1.000	R4.0	45
Water	304.5	General Str & Imp	R1.5	35							
Water	304.6	Office Str & Imp	R1.0	50							
Water	304.7	Store, Shop, & Garage Str & Imp	R2.5	50							
Water	304.8	Miscellaneous Str & Imp	S1.5	40							
Water	305	Collecting & Impounding Reservoirs	R3.0	90							
Water	306	Lake, River, & Other Intakes	R3.0	55							
Water	307	Wells & Springs	R1.5	50							
Water	308	Infiltration Galleries & Tunnels	R2.5	70							
Water	309	Supply Mains	S1.5	85	Water	309.2	WTP Services	HWW-139	1.000	R4.0	45
Water	310	Power Generating Equipment	R3.0	45							
Water	310.2	Other Power Generation Equipment	R2.5	25							
Water	311	Pumping Equipment									
Water	311.2	Electric Pumping Eqp	R1.5	43	Water	311.2	Pumping Equipment	HWW-19	1.000	R4.0	30
Water	311.3	Diesel Pumping Eqp	R1.5	43	Wastewater	371.3	Pumping Equipment	HWW-19	1.000	R4.0	30
Water	311.4	Hydraulic Pumping Eqp	R1.5	43	Wastewater	355.2	Generating Equipment & Controls	USBL54	1.000	R4.0	35
Water	311.5	Other Pumping Eqp	R1.5	43							
Water	320	Water Treatment									
Water	320.1	Structures & Improvements	S0.0	60	Water	320.3	Water Treatment Equipment (WTP)	HWW-116	1.000	R4.0	30
Water	320.2	Filter Media	S1.0	9							
Water	330	Distribution Reservoirs & StndPipes	R2.5	70	Water	330.4	Elevated Tanks	HWW-123	1.000	R4.0	45
Water	331	Mains			Water	331.4	Distribution - Mains	HWW-135	0.650-1.000	R4.0	60
Water	331.01	Other Mains	R2.5	120	Water	331.41	Distribution - Valves	HWW-135	1.000	R4.0	60
Water	331.1	4 inch & less Mains	R2.5	120	Wastewater	360.3	Collection Mains - Force	HWW-135	0.650-1.000	R4.0	60
Water	331.2	6 inch to 8 inch Mains	R2.5	120	Wastewater	361.2	Collection Mains - Gravity	HWW-135	0.650-1.000	R4.0	60
Water	331.3	10 inch to 16 inch	R2.5	120	Wastewater	361.2	Collection Mains - Gravity - Mnholes	HWW-145	1.000	R4.0	60
Water	331.4	18 inch & greater Mains	R2.5	120							
Water	332	Fire Mains	R2.0	70							
Water	333	Services	R2.5	75	Water	333.4	Services	HWW-139	1.000	R4.0	35
Water	334	Water Installations & Vaults	R3.0	20							
Water	334.1	Meters	S1.0	15							
Water	335	Fire Hydrants	R3.0	70	Water	335.4	Hydrants	HWW-142	1.000	R4.0	35
Water	336	Backflow Preventers	S2.5	40							
Note:	1 New Jersey American Water Company 2016 Depreciation Study As of December 31, 2016 Prepared by: Gannett Fleming Valuation and Rate Consultants, LLC										

Normal Depreciation – The extent of the normal depreciation in the property was evaluated using age-life depreciation techniques. In age-life depreciation, the property’s depreciation or condition is estimated using the following formulas:

$$\text{Depreciation (\%)} = \frac{\text{Age (years)} \times 100\%}{\text{Service Life (years)}}$$

$$\text{Condition (\%)} = \frac{\text{Remaining Life (years)} \times (100\%)}{\text{Service Life (years)}}$$

where: the property’s Service Life = Age + Remaining Life and
Remaining Life = f(Survival Characteristic, Service Life, and Age)

However, due to the age of some of the assets the extent of the depreciation was limited to 85% of the asset’s original cost and its replacement cost new in order that any assets regardless of its age retain a minimal value in the cost approach as opposed to having no value.

The depreciation parameters used in this appraisal are summarized as follows:

The above depreciation lives are used to quantify the property's depreciation; when that depreciation is applied to the replacement cost new (COR) of \$2,659,679 the resultant COR less normal depreciation (CORLD) was found to be \$898,152 detailed as follows:

New Jersey American Water Company (NJAWC)											
Township of Shrewsbury, NJ											
Water Distribution System											
Water Distribution System											
Investor-Owned Utility											
March 31, 2024											
Development of Replacement Cost New Less Depreciation (CORLD)											
(1)	(2)	(3)	(4)	(5)	(6)	(17)	(18)	(19)	(20)	(21)	(22)
Township of Shrewsbury, Monmouth County, New Jersey											
Water Distribution System											
ITEM				Unit Costs	Unit	Replacement cost New	Installation Date	Age	Life	Condition	RCN less Depreciation (RCNLD)
				8/1/2021		3/31/2024	1940	3/31/2024	120.00		
NUMBER DESCRIPTION UNIT UNIT PRICE QUANTITY AMOUNT											
Input	NW Financial Group (NWFG) Input	NWFG Input	NWFG Input	NWFG Input	NWFG Input	(7)*(16)	3/31/2024 - (11)	3/31/2024 - (18)	WADS Input	(19)/(20)	(17)*(21)
1	Clearing Site LS \$5,000.00 1 \$5,000.00	LS		5,000.00	1	6,365.00	1940	84.30	120.00	29.8%	1,896.77
2	Test Pits CY \$25.00 400 \$10,000.00	CY		25.00	400	12,730.00	1940	84.30	120.00	29.8%	3,793.54
3	Maintenance and Protection of Traffic LS \$5,000.00 1 \$5,000.00	LS		5,000.00	1	6,365.00	1940	84.30	120.00	29.8%	1,896.77
4	Borrow Excavation, (if & Where Directed) CY \$25.00 1,500 \$37,500.00	CY		25.00	1500	47,738.00	1940	84.30	120.00	29.8%	14,225.92
5	Hot Mix Asphalt 9.5 H64 Surface Course, 2" Thk. TON \$90.00 600 \$54,000.00	TON		90.00	600	68,742.00	1940	84.30	120.00	29.8%	20,485.12
6	Hot Mix Asphalt 19 H64 Base Course, 4" Thk. TON \$90.00 1,200 \$108,000.00	TON		90.00	1200	137,484.00	1940	84.30	120.00	29.8%	40,970.23
7	6" Thick, Dense Graded Aggregate, Base Course SY \$10.00 3,700 \$37,000.00	SY		10.00	3700	47,101.00	1940	84.30	120.00	29.8%	14,036.10
8	Polymerized Joint Adhesive LF \$1.50 7,100 \$10,650.00	LF		1.50	7100	13,557.00	1940	84.30	120.00	29.8%	4,039.99
9	Concrete Vertical Curb - 6" X 8" X 18" LF \$25.00 600 \$15,000.00	LF		25.00	1400	44,555.00	1940	84.30	120.00	29.8%	13,277.39
10	Concrete Sidewalk, 4" thk. SY \$60.00 200 \$12,000.00	SY		60.00	200	15,276.00	1940	84.30	120.00	29.8%	4,552.25
11	Concrete Driveway, Reinforced, 6" thick SY \$80.00 600 \$48,000.00	SY		80.00	600	61,104.00	1940	84.30	120.00	29.8%	18,208.99
12	8" DIP Watermain (Complete and In Pace) LF \$150.00 4,100 \$615,000.00	LF	70.5	150.00	4100	782,895.00	1940	84.30	120.00	29.8%	233,302.71
13	8" Gate Valves, In New Main UNIT \$3,500.00 10 \$35,000.00	Unit	1550	3,500.00	10	44,555.00	1940	84.30	120.00	29.8%	13,277.39
14	8" x 8" Connection to Existing Mains UNIT \$5,000.00 2 \$10,000.00	Unit		5,000.00	2	12,730.00	1940	84.30	120.00	29.8%	3,793.54
15	12" x 8" Connection to Existing Main UNIT \$8,000.00 1 \$8,000.00	Unit		8,000.00	1	10,184.00	1940	84.30	120.00	29.8%	3,034.83
16	Water Service Connections, Complete and In Place UNIT \$4,500.00 70 \$315,000.00	Unit	530	4,500.00	70	400,995.00	1940	84.30	120.00	29.8%	119,496.51
17	Water Meters UNIT \$500.00 266 \$133,000.00	Unit		500.00	266	169,309.00	1940	84.30	120.00	29.8%	50,454.08
18	Fire Hydrant Assemblies, Complete and In Place UNIT \$7,000.00 12 \$84,000.00	Unit	4500+117	7,000.00	12	106,932.00	1940	84.30	120.00	29.8%	31,865.74
19	Traffic Striping LS \$2,500.00 1 \$2,500.00	LS		2,500.00	1	3,183.00	1940	84.30	120.00	29.8%	948.53
20	Topsoil / Seeding / Mulch SY \$9.00 400 \$3,600.00	SY		9.00	400	4,583.00	1940	84.30	120.00	29.8%	1,365.73
21	Fuel Price Adjustment LS \$2,000.00 1 \$2,000.00	LS		2,000.00	1	2,546.00	1940	84.30	120.00	29.8%	758.71
22	Asphalt Price Adjustment LS \$2,000.00 1 \$2,000.00	LS		2,000.00	1	2,546.00	1940	84.30	120.00	29.8%	758.71
	SUB TOTAL \$1,572,250.00					2,001,475.00					596,439.55
	CONTINGENCIES - BONDING, DESIGN AND CONSTRUCTION ADMIN. (25%) \$393,062.50		25%			500,369.00	1940	84.30	120.00	29.8%	149,109.96
	TOTAL \$1,965,312.50					2,501,844.00					745,549.51
	Recent Improvements										
	Water Main Repairs Belshaw Ave					22,650.00	2,017.50	6.80	120.00	94.3%	21,358.95
	Water Main Repairs 22 Barker Ave					10,375.00	2,018.70	5.60	120.00	95.3%	9,887.38
	Water Main Repairs 10 Barker Ave					22,925.00	2,020.70	3.60	120.00	97.0%	22,237.25
	Water Main Repairs 10 Barker Ave					33,291.00	2,020.70	3.60	120.00	97.0%	32,292.27
	Service Line Break Belshaw Ave					-	2,021.90	2.40	120.00	98.0%	-
	Service Line Break 18 Barker Ave					-	2,021.10	3.20	120.00	97.3%	-
	Water Main Repairs 22 Barker Ave					22,854.00	2,021.10	3.20	120.00	97.3%	22,236.94
	Water Main Repairs 24 Baker Aver 8"					17,425.00	2,021.30	3.00	120.00	97.5%	16,989.38
	Water Main Repairs 32 Baker Aver 8"					28,308.00	2,021.30	3.00	120.00	97.5%	27,600.30
	Subtotal Recent Improvement					157,828.00					152,602.47
	Grand Total					2,659,672.00					898,151.98

The preliminary cost approach to value of Shrewsbury, NJ's water distribution system property was found to \$898,152.

Income Approach

The income approach to value establishes the value of the property based on its economic returns. There are two generally accepted procedures in performing an income analysis: the direct capitalization of anticipated income, and the discounted cash flow procedures.

In the direct capitalization approach, anticipated earnings are capitalized directly into value using a market-required capitalization rate. The Shrewsbury's water distribution systems' operations will be moving from a municipal operation, wherein economic returns are not the primary objective of the operation to a private (investor owned) rate regulated water and sewer utility operation in which economic returns are one of the objectives of the operation; therefore, the direct capitalization of earnings approach was not utilized in this appraisal.

In the discounted cash flow (DCF) approach, the property's economic returns are forecast for future periods. The cash flows (debt-free after-tax net cash flows) from operations are discounted to the appraisal date using a market derived discount rate resulting in the DCF approach's income indicator of value. Use of the DCF approach allows the appraiser to address the property's historical operating experience and its migration, in future periods, to an operation as a rate regulated income taxed (local, state, and federal) operation; thus, making the DCF approach preferable in this case.

In preparing this appraisal's DCF analysis (Income Approach tab), first the results from the Shrewsbury's water system cost approach was used to develop the revenue requirement as a rate of return rate base NJ BPU regulated investor owned water utility as follows:

New Jersey American Water Company (NJAWC)					
Township of Shrewsbury, NJ					
Water Distribution System					
Investor-Owned Utility					
As of March 31, 2024					
Development of the Revenue Requirement					
Cost Approach					
Original Cost			Replacement Cost		
Original Cost	194,104.44		Replacement Cost		2,659,672.00
Depreciation			Depreciation		
Age	84.30		Age		84.30
Life	120.00		Life		120.00
Condition	72.5%		Condition		33.8%
Original cost less Depreciation	140,820.91		Original cost less Depreciation		898,151.98
Return on Rate Base					
Weight Return on Rate Base	8.81%		Weight Return on Rate Base		8.81%
Authorized Return	12,406.74		Authorized Return		79,129.84
Operating Expense					
Water Purchase Expense	72,610.00				72,610.00
Operation Expense	38,644.95				38,644.95
EBITDA	12,406.74				79,129.84
Percentage of Revenues	42.58%				42.58%
Depreciation			Depreciation		
Life	120.00		Life		120.00
Age	84.30	-	Age		84.30
Remaining Life	35.70	-	Remaining Life		35.70
Annual Depreciation	3,944.56		Annual Depreciation		25,158.32
Revenue Requirement					
	127,606.25				215,543.11

The pretax required return used in the rate base model was determined as follows:

Pretax Reuired Return							
Capitl	Proportion	Required Return	Wtd Return	Pretax Cost of Equityt Adjustm			
Debt	50%	3.78%	1.89000%		1.89000%		
Equity	50%	9.95%	4.97500%	1.391014	6.92029%		
					8.81029%		
Revenue Multiplier							
Statutory State Tax Rate	9.0%	(1)	Input				
Statutory Federal Tax Rate	21.0%	(2)	Input				
1-State Tax Rate	0.91	(3)	=1-(1)				
Fed Rate times (-State Tax Rate)	0.1911	(4)	=(2)*(3)				
Effective Tax Rate	0.2811	(5)	=(4)+(1)				
					Refurbishment (Curred in Place Relining) Cost @ 3/31/2024		-
1-eff Tax Rate	0.7189	(6)	=1-(5)				
Reciprical (1/(1-eff Tax Rate))	1.391014049	(7)	=1/(6)				

The following table presents the results of the discounted cash flow analysis:

Income Approach	Originl Cost	Replacement Cost
Revenue	127,606.25	215,543.11
Operating Expense		
Water Purchase	72,610.00	72,610.00
Operating Expense	38,644.95	38,644.95
EBITDA	33,965.05	33,965.05
	26.62%	26.62%
Depreciation	3,944.56	25,158.32
Operating Expenses	115,199.51	136,413.27
Operating Income	12,406.74	79,129.84
Taxes	30.00%	30.00%
Taxes	3,722.02	23,738.95
After tax Income	8,684.72	55,390.89
Depreciation	3,944.56	25,158.32
Cash Flow from Operations	12,629.28	80,549.21
Refurbishing Cost	353,925.00	353,925.00
Annual Refurbishing Cost	10	10
	35,392.50	35,392.50
After Tax Cash Flows	(22,763.22)	45,156.71
Debt Free After Tax Discount Rate	7.73%	7.73%
Indicated Value	(294,478.91)	584,174.77

Finally, the resultant cash flows from future period operations of the System were discounted to the appraisal date using a market derived discount rate for a public investor-owned

water/wastewater utility. The following table details the market discount rate developed using the weighted average cost of capital (WACC) of the market debt and equity:

Water and Wastewater Cost of Capital							
First Quarter 2024 (01-01-2024)							
As an Investor-Owned Utility							
Weighted Cost of Capital (Discount Rate)							
(1)	(2)	(2a)	(3)	(3a)	(4)	(4a)	(5)
	Portion of Capital	Type of Data	Capital Cost	Type of Data	Tax Rate	Tax affect on cost of capital	After-tax Market Capital Cost
	AUS Input		AUS Input				(2)*(3)*(4a)
Debt	37%	Market	5.50%	Market	28.11%	71.89%	1.46%
Equity	63%	Market	9.95%	Market	0.0%	100.0%	6.27%
Total Capital r	100.0%						7.73%

Based on the above-described discounted cash flow analysis, the Income Approach to value of the Systems’ property operating as a rate regulated utility under the regulation of the New Jersey Board of Public Utilities (NJ BPU) was determined to be \$584,175.

Market Approach

The market or comparable sales approach to value looks to market sales of comparable properties in order to arrive at value. In this appraisal, the market approach was addressed from a comparable sales approach of water and wastewater systems with similar characteristics as Shrewsbury, NJ’s property and operation.

Market Sales – In the comparable sale market approach, the sales of municipal water and wastewater systems to investor-owned water/wastewater utilities were used to provide comparability to municipal properties moving to rate regulated properties under a fair market value law similar to WIPA. The following sales were considered:

New Jersey American Water Company (NJAWC)								
Township of Shrewsbury, NJ								
Water Distribution System								
Water Distribution System								
Investor-Owned Utility								
March 31, 2024								
Development of Market Approach								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sale	Seller / Lessee / Concessionee	State	Population	Sale Year	Buyer / Lessor / Concessionaire	Sale Price	Utility Type	Utilities
Input	Input	Input	Input	Input	Input	Input	Input	Input
1	Egg Harbor City NJ	NJ	4,243	2021	NJ American Water	21,800,000	Water / Sewer	2
2	Long Hill, NJ	NJ	8,702	2019	NJ American Water	12,700,000	sewer	1
3	Haddonfield, NJ	NJ	11,593	2015	NJ American Water	28,675,000	water/Sewer	2
6	Bound Brook, NJ	NJ	10,254	2022	NJ American Water	5,000,000	Sewer	1
7	Allendale, NJ	NJ	6,734	2022	Veolia / Suez	18,000,000	water/Sewer	2
8	Somerville	NJ	12,139	2022	NJ American Water	7,000,000	Sewer	1

The following tables extracted from the above data were used in in the Shrewsbury Market Approach:

Market Price per mile and customer

New Jersey American Water Company (NJAWC)					
Township of Shrewsbury, NJ					
Water Distribution System					
Water Distribution System					
Investor-Owned Utility					
March 31, 2024					
Development of Market Approach					
(1)	(2)	(10)	(11)	(12)	(13)
Sale	Seller / Lessee / Concessionee	Asset Miles	Price per Mile	Customers / Connections	Price / Customer / Connection
Input	Input	Input	(7)/(10)	Input	(7)/(12)
1	Egg Harbor City NJ	52	419,231	3,000	3,633
2	Long Hill, NJ	57	222,807	2,800	4,536
3	Haddonfield, NJ	66	434,470	4,545	3,155
6	Bound Brook, NJ	25	200,000	3,000	1,667
7	Allendale, NJ	44	409,091	2,507	3,590
8	Somerville	35	200,000	3,812	1,836
	Mean		337,120		3,316
	Median		315,949		3,373

Market Price per Revenues and EBITDA

New Jersey American Water Company (NJAWC)								
Township of Shrewsbury, NJ								
Water Distribution System								
Water Distribution System								
Investor-Owned Utility								
March 31, 2024								
Development of Market Approach								
(1)	(2)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Sale	Seller / Lessee / Concessionee	Prior Annual Revenue	Revenues / Customer	Gross Revenue Multiplier	Prior Annual Expens	EBITDA/Revenues	EBITDA	Price per EBITDA
Input	Input	Input	(7)/(14)	(7)/(15)	Input	(7)/(17)	(14)-(17)	(7)/(19)
1	Egg Harbor City NJ	2,079,000	346.50	10.49	1,048,000	49.59%	1,031,000	21.14
2	Long Hill, NJ	2,204,800	787.43	5.76	1,295,000	41.26%	909,800	13.96
3	Haddonfield, NJ	3,677,000	404.51	7.80	1,634,000	55.56%	2,043,000	14.04
6	Bound Brook, NJ	1,600,000	533.33	3.13	1,305,436	18.41%	294,564	16.97
7	Allendale, NJ	2,000,727	399.03	9.00	1,625,409	18.76%	375,318	47.96
8	Somerville	2,680,000	703.04	2.61	2,380,000	11.19%	300,000	23.33
	Mean		494.16	7.24		36.72%		22.81
	Median		468.92	6.78		30.01%		19.06

The following table summarizes both the comparable sales analysis and the Market Approach conclusion of this appraisal:

New Jersey American Water Company (NJAWC)							
Township of Shrewsbury, NJ							
Water Distribution System							
Water Distribution System							
Investor-Owned Utility							
March 31, 2024							
Development of Market Approach							
	Compara ble Sales Metrics		Mean	Median	Use	Shrewsbury Base	Indicted Value
	Price per Customer / Connection		3,316	3,373	3,316	265	878,740
	Price per Mile		337,120	315,949	337,120	0.634	213,734
	Gross Revenue Multiplier		7.24	6.78	7.24	71,480	517,515
	EBITDA Multiple		22.81	19.06	22.81	12,407	283,047
	Market Indication						517,515

The market approach conclusion of this appraisal was determined to be \$517,515.

Cost Approach Revisited

Before concluding this appraisal's fair market value, the preliminary cost approach conclusion of \$898,152 needs to be reviewed in light of the above-described income and market analyses in order to evaluate if external obsolescence exists in the preliminary replacement cost new less depreciation conclusion. The appraisal literature in regard to developing a cost approach states:

“The last step in the implementation of the cost approach is to estimate *economic obsolescence*. Economic obsolescence (sometimes called “external obsolescence”) has been previously defined as the loss in value or usefulness of a property caused by factors external to the asset. These factors include increased cost of raw materials, labor, utilities (without an offsetting increase in product price); reduced demand for the product; increased competition; environmental or other regulations; or similar factors.

The difficulty in measuring the full effect of economic obsolescence is one of the weaknesses of the cost approach. Because economic obsolescence is usually a function of outside influences that affect an entire business (i.e., all tangible and intangible assets) rather than individual assets or isolated groups of assets, it is sometimes measured using the income approach or by using the income approach to help identify the existence of economic influences on value. However, the cost approach can be used to measure some forms of economic obsolescence.”⁹

The above-described income approach value conclusion of \$584,175 and the market approach conclusion of \$517,515 for Shrewsbury's future water systems compared to the preliminary cost approach conclusion of \$898,152 indicates significant external obsolescence exists in the preliminary cost approach conclusion detailed as follows:

⁹ Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets, Second Edition, pp. 96-97.

Township of Shrewsbury, NJ		
Water Distribution System		
Investor-Owned Utility		
As of March 31, 2024		
	Column Reference in OCLD & RCNLD	Amount in \$s
Depreciated Replacement Cost (RCNLD)		
Original Cost (OC)		
Replacement Cost New (RCN)	17	2,659,672
Replacement Cost New less Depreciation (RCNLD)	22	898,152
Other Indicators		
Market		517,515
Income		584,175
Use		584,175
Economic Obsolescence		-34.96%
Use		-35.00%
Fair Market Vaue (FMV)		583,799

When the economic obsolescence factor of 35.00% is applied the previously determined preliminary cost approach of \$898,152 the final cost approach conclusion of \$583,799 was determined.

Value Conclusion

Based on our appraisal the Fair Market Value of Shrewsbury Townships NJ’s water distribution systems’ property, plant, and equipment operating as rate regulated utilities is \$561,830 determined based on the cost, income, and market approaches to value, as detailed in the following table:

Township of Shrewsbury, NJ			
Water Distribution System			
Investor-Owned Utility			
As of March 31, 2024			
Fair Market Value Appraisal			
Appraisal Approach	Investor-owned Utility	Weight	Wtd Valuation Indications
Cost Approach			
Inventory of Assets			
Original Cost (\$OC)	194,104		
Depreciated Original Cost (\$OCLD)	140,821		
Cost Approach of all assets Conclusion	140,821		
Replacement Cost			
Replacement Cost New (COR)	2,659,672		
Depreciated Replacement Cost New (CORLD)	\$ 898,152		
External or Economic Obsolescence	-35.00%	AUS Input	
Market Value of Tangible Assets	\$ 583,799		
Cost Approach of all assets Conclusion	583,799		
Cost Approach Conclusion	583,799	33.33%	194,600
Income Approach			
	584,175		
Income Approach Conclusion	584,175	33.33%	194,725
Market Approach			
Market Comparables (to)			
Price per Customer	878,740		
Price per Mile	213,734		
Gross Revenue Multiplier	517,515		
EBITDA Multiple	283,047		
Market Approach Conclusion	517,515	33.33%	172,505
Appraisal Conclusion	\$ 561,830	100%	561,830
Conclusion (cost approach)	\$ 583,799		

As the purpose of this appraisal was to fulfill the requirements of WIPA in the establishment of value for rate making of the Township of Shrewsbury, NJ's water system property, plant and equipment the appraisal's conclusion of \$561,830 is consistent with the purpose of this appraisal.