west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street, SE
Charleston, WV 25304
Phone: 304-926-0495 / Fax: 304-926-0463

Harold D. Ward, Cabinet Secretary
dep.wv.gov

MEMORANDUM

To: Marie Prezioso, Chair
Meredith J. Vance, Director, Environmental Engineering Division, BPH

From: Katheryn Emery, P.E., Engineer Chief
Sewer Technical Review Committee

Date: June 16, 2025

Subject: Town of West Hamlin
IJDC Application - 2020W-1876
Water Plant Upgrade Scope and Funding Change

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1. This committee has reviewed the preliminary application and engineering report submitted for the above referenced project in accordance with Chapter 31, Article 15A. It has been determined that the proposed project is:

   a. ___ Consistent with the intent of the Infrastructure and Jobs Development Act and is the most cost-effective, environmentally sound alternative for solving the water needs in this area.

   b. ___ Not consistent with the Act and may not be the most cost effective, environmentally sound alternative for solving the wastewater needs in this area.

   c. √ Same as (a) above except that certain issues need to be addressed prior to design and construction as the attached comments indicate.

2. Our recommendation is that:

   a. ___ The Funding Committee needs to review the proposed sources of funding to determine the best mix of grant and/or loan funds in accordance with applicable guidelines.

   b. ___ The Funding Committee should recommend that the Council approve the proposed project and its funding plan.

c. √ The Funding Committee does not need to review the funding assumptions on this project because of deficiencies in the engineering report. The proposed project should be tabled for the consultant to address technical comments.

d. ___ This project should be referred to the Consolidation Committee.

3. Other remarks:

The proposed project should be tabled until the July 2025 funding committee meeting to allow time for the consultant to review technical and funding concerns.

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MEMORANDUM

TO: Katheryn Emery, P.E., Engineer Chief, DWWM

FROM: Chantz Rankin, E.I., DWWM

DATE: June 2, 2025

SUBJECT: Town of West Hamlin
IJDC Application - 2020W-1876
Water Plant Upgrade Scope and Funding Change

RECOMMENDATION

The request for scope and funding change of the above-mentioned project submitted by The Thrasher Group, Inc. has been reviewed and should be tabled to the July 2025 funding/technical meeting.

DISCUSSION

The Town of West Hamlin (Town) owns and operates a Water Treatment Plant (WTP) and distribution system under Public Water System Identification number (PWSID#) WV3302203 in Lincoln County, WV. The system serves approximately 1,000 customers in West Hamlin, and an additional 1,200 customers in the Branchland-Midkiff Public Service District (PSD). The Town's system consists of a 560 gallon per minute (gpm) water treatment plant, four (4) water storage tanks, 41 miles of water mains, and one booster station.

In 2019, the Town began pursuing a project to upgrade the existing WTP and refurbish the four existing water tanks. The Town received a funding recommendation from IJDC June 5, 2020; proposing the project would be funded by a USDA Grant and USDA Loan. The total project

amounted to $5,682,100. Since 2020, the costs have increased and the current funding scenarios are no longer available.

The proposed scope and funding change phases the project into two phases. Phase I will include the tank improvements; which include the cleaning, re-caulking, and repainting of the tanks. This phase will also include the Design of the WTP upgrade. Phase II will encompass the upgrade of the treatment facility. The only significant change in the scope of work proposed in Phase II is the need to replace, rather than refurbish the existing pre-sedimentation basin.

COMMENTS/CONCERNS

The issue with including the design costs for Phase II in Phase I, is that the design funding for Phase 2 is $ 590,000. The Phase II project may not materialize, and the evaluation of consolidation or purchasing of water should be considered.The funding scenarios proposed for Phase I and Phase II are shown below:

Phase I (Tank Improvements)

DWTRF (Debt Forgiveness)	$ 1,500,000
IJDC Grant	$ 500,000
EEG Grant	$ 550,000
Total Project Cost	**$ 2,550,000**

Phase II (Treatment Facility Upgrades)

ARC Grant	$ 2,500,000
DWTRF Loan	$ 3,600,000
DWTRF (Debt Forgiveness)	$ 1,500,000
IJDC Grant	$ 500,000
Local (Branchland-Midkiff PSD)	$ 1,000,000
Total Project Cost	**$ 9,100,000**

Public Service Commission of West Virginia

201 Brooks Street, P.O. Box 812
Charleston, West Virginia 25323

Phone: (304) 340-0300
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June 18, 2025

Meredith J. Vance
Office of Environmental Health Services
350 Capitol Street, Room 313
Charleston, West Virginia 25301-3713

Re: Public Service Commission Staff Review Comments
Application No. 2020W-1876
West Hamlin, Town of – Water System Improvements
Infrastructure Preliminary Application

Dear Ms. Vance:

As requested, the Technical Staff of the Public Service Commission of West Virginia has completed its review of the above-referenced Infrastructure application. In light of Technical Staff's comments enclosed herewith, we are recommending the application be:

_____ Forwarded to the Funding Committee

____ Forwarded to the Consolidation Committee

__X__ Tabled to allow the Applicant time to respond to comments

Please advise if you have any questions.

Sincerely,

Brandon Crace

Brandon Crace
Engineering Division

Enclosures
BC:vb

ENGINEERING: Brandon Crace

1. Pursuant to House Bill 2742 passed in the 2025 Legislative Session, this project will not require a Certificate of Convenience and Necessity from the PSC.

2. Scope: The Town of West Hamlin (West Hamlin) has submitted a revised PER that details a proposal to now phase the proposed project scope into 2 separate phases. Phase 1 is proposing to refurbish 4 existing water storage tanks, and Phase 2 is proposing to replace a significant portion of the existing Water Treatment Plant. The proposed project scope for (Phase 1) includes: repainting 3 existing water storage tanks, refurbishing the West Hamlin Hill Tank, valve vault improvements, pre-construction video, and mobilization/demobilization. The estimated construction cost is $1,250,000 (includes 13.2% construction contingency), and the estimated total project cost is $2,550,000 (includes $653,500 of professional services related to Phase 2). The proposed project scope for (Phase 2) includes: replacement of 2 existing filters, new filter building, electrical upgrades, 300 LF of sludge piping from sedimentation basin, rehabilitate raw water intake, repair raw water pump station, replacement of 2 raw water pumps, install clearwell baffles, clean backwash basin, install PRV at booster station, new emergency generator (w/transfer switch) at West Hamlin Hill booster station, new emergency generator (w/automatic transfer switch), 2 new high service pumps, telemetry system upgrades, miscellaneous site and building repairs, upgrade booster pumping station, 2 office trailers, erosion control, pre-construction video, and mobilization/demobilization. The estimated construction cost is $7,900,000 (includes 12.8% construction contingency), and the estimated total project cost is $9,100,000 (excludes $653,500 of professional services related to Phase 2 shown in Phase 1).

   Need: The PER states the corrosion is severe on the two existing filter basins, the raw water intake and pumping station have experienced mechanical failures, electrical systems and controls are antiquated, the plant does not have an emergency on-site generator, and paint on the exterior of the three welded steel tanks has oxidized and corrosion is evident. The PER further states that "…replacing all of the mechanical and electrical equipment and the water filter units is necessary to maintain a safe and reliable source of water…". Additionally, the PER indicates that the backwash basin and clearwell need to be cleaned.

   Customer Density: This project is an upgrade project; therefore, customer density will remain unchanged.

Cost per Customer: Phase 1 – Based upon the estimated total project cost is $2,550,000, and having approximately 1009 (includes 1 bulk customer [Branchland-Midkiff PSD]) customers, the cost per customer will be approximately $2,527. The cost per customer in terms of proposed borrowing is $0, as the proposed funding is 100% grant. *(If the professional services associated with Phase 2 are removed, the total project cost is $1,896,500 and the cost per customer will be approximately $1,880.)*
Phase 2 – Based upon the estimated total project cost is $9,100,000 (excludes $653,500 of professional services related to Phase 2 shown in Phase 1), and having approximately 1009 (includes 1 bulk customer [Branchland-Midkiff PSD]) customers, the cost per customer will be approximately $9,019. The cost per customer in terms of proposed borrowing is $0, as the proposed funding is 100% grant. *(If the professional services associated with Phase 2 are added, the total project cost is $9,753,500 and the cost per customer will be approximately $9,667.)*

3. Project Feasibility: The proposed Phase 1 (water storage tanks) project scope appears to be technically feasible and poses some technical risk, as the PER indicates "The glass lined tank needs scheduled maintenance (cleaning, re-caulking and repairs) and a manufacture's inspection…". Therefore, it is unknown what scope of work the glass lined tank may require until the inspection is completed. In regards to Phase 2, the engineer did not evaluate alternatives, such as an inter-connection with WVAWC in lieu of WTP upgrades.

4. Project Alternatives: The PER evaluated two (2) alternates for each phase location; Phase 1: "Do Nothing" Alternative and Refurbish Existing Tankage, Phase 2: "Do Nothing" Alternative and Refurbish Existing Facility. The PER indicates "Improvements to West Hamlin's water system will consist of the following components:", including "Establish Inter-connection with WV American Water Company at Hamlin (future project)". The PER does not include an evaluation of an inter-connection with WVAWC.

5. Consolidation: As previously stated, the PER indicates "Improvements to West Hamlin's water system will consist of the following components:", including "Establish Inter-connection with WV American Water Company at Hamlin (future project)". However, the PER does not include an evaluation of an inter-connection with WVAWC

6. Operation and Maintenance (O&M) Expenses: The PER states that O&M costs are not expected to change, “Since no new customers are being served by the project, operation and maintenance costs for the West Hamlin water system are not expected to change from their current levels, although costs may increase because of increased prices for power, chemicals, fuel, etcetera.”.

7. Engineering Agreement: The application includes information to determine compliance with West Virginia Code §5G-1-1, *et seq*. Phase 1 – Total technical services (engineering) costs for the project are $948,000 ($590,000 is Phase 2 Design), which is equal to 75.8% of the construction cost of $1,250,000 (includes 13.2% construction contingency). *(However, if Phase 2 Design is removed from the engineering costs, the total engineering services becomes $358,000, which is equal to 28.6% of the construction cost.)* ***(Amounts taken from the PER)***
   Phase 2 – Total technical services (engineering) costs for the project are $745,000 (excludes Phase 2 Design), which is equal to 9.4% of the construction cost of $7,900,000 (includes 12.8% construction contingency). *(However, if Phase 2 Design is added to the engineering costs, the total engineering services becomes $1,335,000, which is equal to 16.9% of the construction cost.)* ***(Amounts taken from the PER)***

8. Deficiencies/Comments:

   - It has been 5 years since the Rule 42 was filed, on May 28, 2025, PSC Financial reviewers requested an updated Rule 42, OR an updated Cash Flow, based on the most recent fiscal year. *(This information has not been received; therefore, PSC Financial reviewers have not been able to review the most recent fiscal information.)*
   - The PER states that a “future project” is to establish inter-connection with WVAWC at Hamlin. This alternative was not evaluated in the PER. Furthermore, an inter-connection with WVAWC at Hamlin would not require the proposed WTP upgrades and should considerably reduce the scope of Phase 2 and reduce O&M costs. *(The engineer should evaluate an alternative that includes an inter-connection with WVAWC, and further evaluate purchasing water vs. being acquired by WVAWC.)*
   - The PER describes a dire need to make upgrades to the existing WTP, indicating that without making the necessary upgrades “…the likelihood of failure is significant.”. However, Phase 1 does not make any improvements to the WTP and 5 years has passed since the IJDC Application was first submitted. This indicates that the time necessary to complete design, bidding, delivery of mechanicals (equipment), and complete construction of the proposed Phase 2 scope of work may not be achievable prior to a

potential failure of equipment, which further justifies the evaluation of an inter-connection alternative.

- The proposal to include professional services associated with Phase 2 increases the Phase 1 project cost by $653,500, which is ***approximately 26%*** of the total project cost ($2,550,000). *(Removal of Phase 2 professional services results in a Phase 1 total project cost of $1,896,500. Additionally, the inclusion of Phase 2 professional services raises the Phase 2 total project cost to $9,753,500.)*
- The explanation of O&M expenses is not supported by any calculations and is confusing as the PER states "Since no new customers are being served by the project, operation and maintenance costs for the West Hamlin water system are not expected to change from their current levels, although costs may increase because of increased prices for power, chemicals, fuel, etcetera.". *(The proposed equipment's power consumption, chemical costs, etc. was not included in the PER.)*
- Phase 1 – Engineering during construction is valued at 7 months, but the RPR is valued at 4 months. The inconsistency in time needs to be addressed or explained as it directly affects the total project cost.
- Phase 2 – Engineering during construction is valued at 24 months, but the RPR is valued at 16 months. The inconsistency in time needs to be addressed or explained as it directly affects the total project cost.