

#### State of Vermont Department of Environmental Conservation

Agency of Natural Resources Drinking Water and Groundwater Protection Division

# PUBLIC WATER SYSTEM CONSTRUCTION PERMIT Public Community Water System

### **LAWS/REGULATIONS INVOLVED**

10 V.S.A. Chapter 56, Public Water Supply VT Environmental Protection Rules, Chapter 21, Water Supply Rule

PROJECT # C-3911-20.0 PIN # BR08-0384 WATER SYSTEM: Berlin Municipal Water System WSID # VT0021202

PERMITTEE:

TOWN OF BERLIN 108 SHED ROAD BERLIN VT 05602

PROJECT NAME: Town of Berlin New Well No. 4 Connection

TOWN LOCATION: Berlin, Vermont

The initial application proposed "The Town is applying to connect the new Well No. 4 to the existing treatment building via a new 4" water line, and to make minor improvements to the existing treatment building. In addition, the Town has proposed a system wide water meter replacement contract." The project is in Berlin, Vermont.

Subject to the conditions included herein, Town of Berlin (the Permittee) is authorized to install a new 4-inch diameter transmission main from Well No. 4 (WL004) to the existing treatment building (TP001) and upgrade the existing treatment building to tie in Well No. 4 as described in the approved design documents identified in Condition A.1 of this permit.

Pursuant to Subchapter 21-4 of the Rule, this project requires a construction permit because it involves the connection of a new source supply and modifications to an existing treatment facility of a Public Community Water System known as the **Berlin Municipal Water System**, WSID # VT0021202 (Water System).

Any person aggrieved by this permit may appeal to the Environmental Court within 30 days of the date of issuance of this permit in accordance with 10 V.S.A. Chapter 220 and the Vermont Rules of Environmental Court Proceedings.

This permit does not authorize operation of the permitted modifications. Once the activities authorized by this Construction Permit have been completed, but prior to placing them into operation, the written signed and stamped Construction Completion Certification required by Condition A.5 of this permit shall be provided to the Division. Following receipt of the Construction Completion Certification, the Division will issue a permit to Operate to the Water System that formally recognizes the construction activities authorized by this permit.

This Project is permitted to be constructed to conform to the Vermont Standards for Water System Design, Construction, and Protection (Design and Construction Standards) contained in Appendix A of the Rule and shall not constitute a public health hazard or a significant public health risk. The Division's review is limited to the Rule and the associated federal requirements.



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# A. Standard Conditions

1. The project shall be constructed, tested, and inspected in accordance with this permit and the approved engineering drawings and specifications prepared by Otter Creek Engineering listed below:

Design Documents Reviewed as part of Permit Application			
Document Name	Document Date	Last Revision Date	
Email correspondence with Robert Clark, Otter Creek Engineering, discussing responses to the Division's technical comments and revised Engineering Drawings and Technical Specification Section 331400	June 30, 2021	None.	
Email correspondence with Robert Clark, Otter Creek Engineering, discussing responses to the Division's technical comments and providing revised Basis of Design, Chemical Feed Calculations, Disinfection Contact Time Calculations, and revised Engineering Drawings	May 7, 2021	None.	
Engineering Drawings, Sheets: Cover, I-1, C-3, and C-5	December 29, 2020 (Date Received)	April 30, 2021	
Engineering Drawings, Sheets: C-1 and C-2	December 29, 2020 (Date Received)	None.	
Engineering Drawings, Sheet: C-4	December 29, 2020 (Date Received)	May 25, 2021	
Engineering Drawings, Sheets: Construction Details sheet 1	December 29, 2020 (Date Received)	June 30, 2021	
Technical Specifications, Section 331400	December 29, 2020 (Date Received)	June 30, 2021	
Disinfection Contact Time Calculations	May 7, 2021	None.	
Basis of Design and Chemical Feed Information	December 29, 2020 (Date Received)	May 7, 2021	
Construction Permit Application, including Equipment Cut Sheets	December 29, 2020 (Date Received)	None.	

The total number of engineering drawings reviewed by the Division for this project is eight (8).

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This design is permitted based upon review that determined the design conforms to the Design and Construction Standards of the Rule. Issuance of this permit does not relieve the Permittee of their responsibility to ensure that the Water System's infrastructure meets the requirements of the Rule. The Permittee shall be responsible for performing any necessary actions required to resolve any sanitary deficiencies or defects identified related to the infrastructure modifications authorized by this permit.

- 2. Field inspection of the project shall be performed under the responsible charge of a Vermont-licensed professional engineer.
- 3. Prior to being placed in operation, the newly constructed portions of the Water System shall be flushed, pressure tested, disinfected, and flushed again. After this procedure, at least two sample sets must be collected from representative sample points while meeting the minimum resampling periods between sample collection specified in the Rule and sent to a Vermont Department of Health certified laboratory for Bacteriological Examination of Public Water Supply. The Permittee shall indicate on the laboratory form that the sample is for "Construction Permit Compliance." Coliform Absent sample results are required before the system may be placed into operation for potable water use. The pressure/leakage and bacteriological test results shall be submitted to the Division.
- 4. Record drawings shall be prepared by the Vermont-licensed Professional Engineer responsible for observation of construction and shall depict the system as it was constructed, including any field modifications. Record Drawings shall be dated, contain the Vermont-licensed Professional Engineer Construction Completion Certification, seal and signature on each sheet, and shall be submitted to the Division and, if applicable, to the Water System providing source water and treatment (Wholesaler) within 60 days of final field inspection and approval.
- 5. The following Construction Completion Certification shall be prepared by the Vermont-licensed Professional Engineer responsible for the observation of construction and submitted with a signed seal affixed:
  - i. "I hereby certify that in the exercise of my reasonable professional judgment the construction-related information submitted is true and correct and that the components of the Public Water System authorized by Public Water Supply Construction Permit # C-3911-20.0:
    - 1. Were installed in accordance with:
      - a. The permitted design and all permit conditions; or
      - b. Record Drawings and such Record Drawings are in compliance with the applicable rule, were filed with the Secretary, and are in accordance with all other permit conditions;
    - 2. Were inspected;
    - 3. Were properly tested; and
    - 4. Have successfully met those performance tests."
- 6. An Operation and Maintenance (O&M) Manual update shall be submitted to the Division for review and approval within 60 days of final project inspection and approval. This O&M Manual update shall be prepared to reflect the modification/improvements/constructed infrastructure authorized by this permit and shall meet the requirements of Appendix D of the Rule. Once this O&M Manual update is approved, the Permittee shall incorporate it into the Water System's approved O&M Manual per the requirements of Subchapter 21-7 of the Rule.

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- 7. If petroleum hydrocarbon and/or chlorinated solvent contaminated soils are encountered during any phase of construction, ductile iron pipe materials shall be utilized with fluoro-elastomer gaskets. All pipe materials less than 3-inches in diameter must be copper pipe containing pressure fittings, and all other appurtenances shall be of material resistant to the contamination. The Permittee shall notify the Waste Management and Prevention Division at (800) 641-5005 or (802) 828-1138 within 12 hours of encountering contaminated soils during this project.
- 8. No changes shall be made to the permitted project without the written approval of the Division. A new or amended Construction Permit is required for all significant system improvements, or modifications to the Water System pursuant to Subchapter 21-4, Section 4.0.1 of the Rule. These improvements or modifications shall conform to the Design and Construction Standards in Appendix A of the Rule.
- 9. **Permit Expiration:** This Construction Permit expires on <u>July 31, 2023</u>. If the Construction Completion Certification has not been submitted by this date, the Permittee shall obtain a new public water system construction permit prior to completing any work that was authorized by this permit.
- 10. This Permit is not transferable or assignable. This Permit is invalid upon a change of ownership or upon suspension or revocation. If a change of ownership occurs prior to the completion of construction and submittal of Record Drawings, the new owner must apply for and obtain a new construction permit.
- 11. By acceptance of this permit, the Permittee agrees to allow representatives of the State of Vermont access to the project, at reasonable times, to ascertain compliance with Vermont environmental laws and this permit.
- 12. Pursuant to 10 V.S.A. Chapters 56, 201 and 211, any violation of the terms and conditions of this permit, including any compliance schedule, is grounds for the initiation of an enforcement action by the State against the Permittee.
- 13. Issuance of this Public Water System Construction Permit does not relieve the Permittee from obtaining other permits or approvals that may be necessary for the Project.

signed at Montpelier, VT this28th_ day of	_, 2021
Peter Walke, Commissioner	
Department of Environmental Conservation	
By Ballings for	
Sille Larsen, Engineering and Water Resources Section Su	pervisor
Drinking Water and Groundwater Protection Division	•

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## AJM

C: Permittee by email: Town of Berlin

Thomas J Badowski, Administrative Contact VT0021202, zoning@berlinvt.org

Nathaniel T Fredericks, Designated Operator VT0021202, fredericksnathaniel@gmail.com

Robert M Clark, Otter Creek Engineering, clark@ottercrk.com

Ben Montross, Public Drinking Water Program Manager, DWGWP

Matthew Caldwell, System Operations Specialist, DWGWP

Celia Riechel, DWSRF Project Developer, WID

Roger Bergeron, DWSRF Chief Construction Engineer, WID

Janelle Wilbur, Chemical Contaminants Rule Manager, DWGWP

Scott Stewart, Division Hydrogeologist, DWGWP

Bridget Phillips, Administrative Services Coordinator, DWGWP

WSID file VT0021202

State of Vermont Department of Environmental Conservation

# Public Water System Construction Permit Public Comment Response

For: Attachment to C-3911-20.0, Town of Berlin New Well No. 4 Connection

From: Drinking Water Groundwater Protection Division

Date: Wednesday, July 28, 2021

Subject: No Comments Received

The Environmental Notice Bulletin Version 2 (ENB) public comment period for the following project ended on 07/21/2021:

Public Water System Permit Number: C-3911-20.0 Project Name: Town of Berlin New Well No. 4 Connection Water System Name: Berlin Municipal Water System

**WSID:** VT0021202

No comments were received.

