

STATE OF NEW YORK

SEVENTH ANNUAL REPORT

OF THE

Conservation Commission

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WATER SUPPLY APPLICATION NO. 225

STATE OF NEW YORK — CONSERVATION COMMISSION.

In the Matter

of the

Application of the VILLAGE OF FORT ANN, for approval of its plans for the acquisition of water supply and the financial and engineering plans for the construction of a water supply system.

Decision.

Application filed December 12, 1916.

Hearing held in Fort Ann, January 16, 1917.

Decision, February 7, 1917.

Approved.

Wilson M. Main, acting on behalf and in the name of the village of Fort Ann, of which he is the president, on December 9, 1916, made application to the Conservation Commission for its approval of the acquisition by said village of a water supply and the installation therein of a water supply system. This application was filed in the office of the Conservation Commission December 12, 1916. On July 6, 1916, this Commission had caused the proposed source of water supply and the sites of the proposed structures to be inspected by one of its engineers; this inspection having been made in connection with another water supply application.

After due notice published in the *Hudson Falls Herald* and the *Whitehall Chronicle*, a hearing was held on this application in the Town Hall in the village of Fort Ann on the 16th day of January, 1917, at 10:00 o'clock in the forenoon. At this hearing the Commission considered the petition, maps and plans submitted, examined witnesses and heard arguments for the project, as shown by the minutes. Fisk & Lewis, represented by David S. Fisk, Esq., appeared at the hearing on behalf of the applicant. J. Ward Russell, Esq.; appeared on behalf of the Kanes Falls Electric Company in support of the application. No objections were filed and no one appeared in opposition.

It is proposed to install in the village of Fort Ann a municipally owned and operated water supply system, capable of supplying water for domestic, public and fire fighting purposes to the inhabitants of that village. The water is to be obtained from the mill pond of the Kanes Falls Electric Company on Halfway creek in Kanesville at a point about one mile northwest of the village and is to be pumped into the village mains by electric power furnished by that company. No standpipe or reservoir is provided, but direct and continuous pumping is to be relied upon.

As the water is drawn from the pond it is to be treated with coagulating chemicals applied by apparatus installed in the house covering the head works of the Electric Company, and discharged into an existing basin of about 66,800 gallons capacity, which is to be utilized as a sedimentation basin.

If necessary the water level in this basin can be held down so as to reduce the detention period in it.

From the sedimentation basin the water is to pass through an 8-inch cast-iron pipe to a filter house. This is to be a substantial masonry building, in which are to be installed two gravity mechanical filters of the "Jewell" wooden tub type with a combined normal capacity of 450 gallons per minute. These are to discharge into a concrete clear water well of 3800 gallons capacity. Regulating devices are to be installed in connection with these filters and also a wash water pump, which is to take its water from the clear water well. As the water leaves the filter house it is to be sterilized by discharging into it a controlled quantity of water highly charged with chlorine gas. The sterilized water is to flow through an 8-inch cast-iron pipe to the pumping station.

Adjacent to the power house of the Kanes Falls Electric Company and connected to it is to be constructed a substantial masonry building, in which are to be installed the necessary pumping units. Two such units are to be provided, one of 100 gallons per minute (144,400 gallons per day) capacity, operated by a five horsepower motor; the other of 600 gallons per minute (864,000 gallons per day) capacity, operated by a 40 horsepower motor. These are to be centrifugal pumps; the motors are to operate on current derived from the generators of the Kanes Falls Company. As direct pumping is to be relied on, the smaller of these units is to run continuously; the larger unit is to be depended upon for fire protection and as a reserve. These pumps are to force the water through an 8-inch diameter cast-iron force main 4,467 feet in length to the village. All the water entering this main is to be measured by a meter installed near the pumping station.

In the built up streets of the village of Fort Ann a distribution system, composed of 6825 feet of 8-inch and 6-inch diameter cast-iron pipe, is to be constructed. Thirteen fire hydrants are to be provided for fire fighting purposes.

After due study of the petition and its exhibits, the evidence and arguments given at the hearing and the report of the engineers of the Commission on this application, it appears as follows:

Fort Ann was incorporated as a village by a special act in 1820. It was re-organized under the provisions of the general village law in 1912. This village is located near the center of the southerly boundary of the town of Fort Ann in Washington county. It is traversed by the Delaware and Hudson railroad and by the Champlain canal. The population, by the census of 1915, was 436 and has been stationary for many years. By the last roll the total assessed valuation of taxable property within the village was \$175,560. The village has no outstanding bonded indebtedness.

At present there is no public water supply system in the village of Fort Ann. The inhabitants thereof obtain water for domestic purposes from some dug wells and from numerous attic tanks and cisterns. In certain houses this supply has frequently been insufficient, so that at times water has had to be carried to them from considerable distances. There is now practically no water available for fire fighting purposes. Dependence was formerly placed on the Champlain canal, which traversed the village, but the new canal was re-located at such a distance from the inhabited area where it is not available for this purpose.

On September 14, 1916, a taxpayers' petition, asking for the submission of a proposition to install a waterworks system, was filed with the Fort Ann Village Board. By resolution, adopted at a meeting held September 18, 1916, said Board called a special election to vote on a proposition for installing this water supply system and issuing village bonds for that purpose in the amount of \$25,000. This election was held on September 30, 1916, and the proposition was carried in the affirmative by a vote of 57 to 22. The making of this petition to the Conservation Commission was authorized by a resolution of the Board of Trustees, adopted at a meeting held December 2, 1916.

Charles E. Perry, a civil engineer of Albany, N. Y., was engaged by the village authorities to prepare plans and estimates for such a water supply system. His plans and the estimates and report on this water supply project were submitted to this Commission with the application.

At the proposed point of diversion Halfway creek has a drainage area of about 76 square miles. Mr. Perry estimates the maximum probable consumption of this village at 70,000 gallons per day, this amount being approximately that due to a consumption of 125 gallons per capita per day by a population of 450, increased by a commercial draft of 12,000 gallons per day. It is improbable that the consumption of water in this village will reach this amount for many years to come. There can be no question but that Halfway creek will furnish ample water for the supply of this community.

The watershed of Halfway creek above the plant of the Kanes Falls Electric Company is comparatively level, sandy country, principally devoted to farming. There are some hills and considerable wooded areas within its limits. The population thereon is not dense, nor is it so situated as to cause concentrated pollution of the creek or its tributaries, the worst conditions being near the head of the valley, where a portion of the village of Glens Falls lies within the drainage area. Nevertheless, the conditions of use of and number of inhabitants on this watershed are such that the water from Halfway creek could not be permitted to be used for domestic purposes without purification. Analyses of this water indicate some pollution and bear out the above findings. With proper operation of the proposed purification plant this water will be safe for all purposes. It will be required that no water be furnished for any purpose until it has been filtered and sterilized in a satisfactory manner, involving in this case the increase of dosage of coagulating and sterilizing chemicals to comparatively high amounts when the larger pump is being operated to full capacity—a rate which somewhat exceeds the usual capacity of the filters. In addition it will be required that no direct discharge of sewage into the mill pond be permitted.

It was originally estimated that this system could be constructed for \$25,000. It is improbable that it could be completely constructed for this amount, unless unexpectedly favorable bids were to be received. In view of the present extreme difficulty of making predictions as to the cost of any works, it would seem unequitable to reject this application on account of an apparent insufficiency of funds. It will, therefore, be approved, subject to the condition that, before any contracts therefor are let, or work thereon started, the village authorities shall receive bids for the construction of the complete system and thereafter shall show to this Commission a reasonable probability that sufficient funds are in hand to construct either the complete

system or such modified system as the Commission may approve — the estimates being based on the actual bids received and the amount available being either that already voted or a greater sum which may hereafter be authorized for the purpose.

Generally speaking this system, if carefully constructed in accordance with the plans and specifications submitted of suitable materials and satisfactory workmanship, will be safe and adequate for the purpose for which designed. As, however, the plans submitted are not final and the village may desire to modify them in some particulars, and as further certain minor details thereof are not entirely satisfactory to this Commission, these plans will be approved only in general terms and it will be required that complete detailed plans be submitted and approved before any construction work is started.

Local conditions have made possible a somewhat unusual method of operating this system. The village of Fort Ann and the Kanes Falls Electric Company have entered into a contract, whereby the operation of these works will be carried on practically entirely by the company. This contract is for a term of ninety-nine years. By its provisions the company provides the land on which the coagulating basin, filter plant and pumping station are to be erected, permits the diversion of water from its pond and engages to operate the pumps under the direction of the village authorities. In return for these services the village is to pay for all power used in pumping at the scheduled rates for such power, subject to such further modifications as the Public Service Commission, Second District, may direct or permit. It is to pay for all water consumed approximately the amount which the company would have received for the electric current which it might have generated by passing that same water through its wheels. It is to pay a specified stand-by charge based on the capacity of its motors. The village also engages to allow the company to connect fire hydrants for the protection of its plant at Kanes Falls to the proposed pipe line, and to draw water therefrom for fire fighting purposes. It is also to supply the company with such quantity of filtered water as it may need — 1200 gallons daily to be furnished without charge, any additional amount to be paid for at the regular rates. Many of the provisions of this contract are peculiar and must needs be so on account of the unusual conditions. Apparently, however, by this means the village will obtain the benefit of expert and continuous operation at comparatively low cost.

Alternative sources of supply, offering advantages superior to the one contemplated to be used, do not seem to exist.

The carrying out of this project will not adversely affect the water supply interests of any other community in this State.

The legal damages which may be caused by the execution of the plans of the petitioner do not appear to be such as to require any special consideration or legislative enactment in order that they may be equitably determined and paid.

In consideration of the above, and subject to the modifications hereafter stated, the Commission therefore finds and determines:

First. That the plans proposed are justified by public necessity.

Second. That said plans provide for the proper and safe construction of all work connected therewith.

Third. That said plans provide for the proper protection of the supply and the watershed from contamination and for the proper filtration of such additional supply.

Fourth. That said plans are just and equitable to the other municipalities and civil divisions of the State affected thereby and to the inhabitants thereof, particular consideration being given to their present and future necessities for sources of water supply.

Fifth. That said plans make fair and equitable provisions for the determination and payment of any and all legal damages to persons and property, both direct and indirect, which will result from the execution of said plans or the acquiring of said lands.

Provided, however, that the said application, maps and plans, as submitted, shall be modified and the Commission does hereby determine that they be modified and that the work done thereunder be subject to the following conditions:

1. All the works proposed in this application shall be completely constructed in accordance with the plans as hereby revised, or as hereafter may be approved.

2. Nothing in this decision and approval contained shall be held to authorize the village of Fort Ann to let contracts, buy materials for or start construction on any part of this proposed waterworks system, or to take or acquire any lands or water rights therefor, unless and until said village shall have submitted further and satisfactory proof of its ability to complete this, or some safe and satisfactory modification of this system at a reasonable cost, not exceeding the amount which now is, or which hereafter may have been authorized to be expended for such purpose, and this Commission shall have issued a certificate to that effect. To that end the village may hereafter submit a statement showing the funds available and the probable cost of the entire system, together with such maps, plans, specifications and reports as the Commission may require. All estimates of cost of construction and materials must be based on actual bids, duly received as required by law, unless the Commission shall otherwise permit. This Commission will not give final permission to construct any waterworks system if, in its opinion, the project has been so changed as to require a modification of the determinations above made. It may hold a further hearing on such revised project.

3. The village of Fort Ann shall not sell or furnish for any purpose to any person, corporation or municipality any water which it has not purified by filtration and sterilization to the satisfaction of this Commission.

4. The village authorities shall prevent the direct discharge of any sewage or dangerous wastes into the waters of the mill pond of the Kanes Falls Electric Company on Halfway brook at Kanesville.

5. After these works have been constructed they shall be inspected by and be subject to the approval of this Commission, and such works shall not be operated until permit to do so has been issued by this Commission, as provided by section 523 of the Conservation Law.

WHEREFORE, the Conservation Commission does hereby approve the said application of the village of Fort Ann as thus modified.

IN WITNESS WHEREOF, the Conservation Commission has caused this determination and approval to be signed by the Commissioner and [L. s.] has caused its official seal to be affixed hereto and has filed the same with all maps, plans, reports and other papers relating thereto in its office in the city of Albany this 7th day of February, 1917.

CONSERVATION COMMISSION.

GEO. D. PRATT,

Commissioner.

Attest: A. S. HOUGHTON,
Secretary to the Commission.

WATER SUPPLY APPLICATION NO. 226

STATE OF NEW YORK — CONSERVATION COMMISSION.

<p style="text-align: center;">In the Matter of the Application of the VILLAGE OF HERKIMER, for approval of its acquisition of an additional source of water supply and of its financial and engineering plans for the construction of the same.</p>	}	Decision.
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Application filed January 12, 1917.

Hearing held in Herkimer, February 1, 1917.

Decision, March 9, 1917.

Approved.

Albert F. Ertman, acting on behalf and in the name of the village of Herkimer, of which he is the president, on January 10, 1917, made application to the Conservation Commission for approval of the plans of that village for the acquisition of a new and additional source of water supply and of the financial and engineering plans for the development of such additional water supply. This application was filed in the office of the Conservation Commission January 12, 1917.

On February 2, 1917, the Commission caused the site of the proposed works and the proposed sources of water supply to be inspected by one of its engineers.

After due notice published in the *Herkimer Citizen*, the *Herkimer Telegram-Record*, the *Newport Journal* and *Utica Press*, a hearing was held on this petition in the office of the Village Clerk in the Municipal Building in the village of Herkimer on February 1, 1917, at 10:00 o'clock in the forenoon. At this hearing the Commission considered the petition, maps and plans submitted, examined witnesses and heard arguments for and against the project,