

State of New York
Department of Conservation
Water Power and Control Commission

Water Supply Application No. 2216

In the Matter of the application

- of the -

Montgomery County

Albany County, New York for ap-
proval of its acquisition of an
additional source of water supply
and of its plans for connecting it
to the existing water supply system.

5th App.

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application filed April 26, 1950

Hearing held in
Painted Post May 22, 1950

Decision June 12, 1950

DECISION OF THE WATER POWER COMMISSION NO. 2799

PAINTED FEET

Charles J. Craig, mayor of the unincorporated village of Painted Feet in the town of Frein, Steuben County, acting in the name and on behalf of said village, on April 18, 1956 made application to the Water Power and Control Commission for approval of the plans of said village for the acquisition or taking of an additional water supply and of the construction proposed in connection therewith. This application was filed in the office of the Commission on April 20, 1956.

After due notice, published in the Corning Leader, the hearing on the application was held before Edwin L. Vopalek, Senior Engineer of the Commission, in the Village Hall in Painted Feet on May 22, 1956 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 in favor of the project. The petitioner was represented by Harry Freinin, Esq., its attorney. No objections were filed and no one appeared in opposition to the project.

On May 22, 1956 the Commission caused an engineering inspection to be made of the site of the proposed works.

PROJECT

The village of Painted Feet now proposes to develop as a new and additional source of water supply for its existing public water supply system, a well recently put down by it on property now reserved for a village park and located in the northwesterly portion of the village immediately north of the right-of-way of the Delaware, Lackawanna & Western Railroad. It is proposed to construct at this location a double-cased, gravel-packed drilled well. This well is to be equipped with an electrically driven deep-well turbine type pump having a capacity of 700 gallons per minute. A concrete masonry structure will be erected over the well to house the pumping equipment and controls. Water is to be pumped through a new 8-inch pipe line to the existing village distribution system. The total estimated cost of this project is \$29,675.

After due study of the petition and its exhibits, and the evidence and arguments given at the hearing, the Commission finds as follows:

FINDINGS OF FACT

1. Painted Feet was incorporated as a village in 1893 and is located in the northeasterly part of the town of Frein in Steuben County. It is situated near the junction of the Tioga and Cohocton Rivers and is adjacent, at its southerly limits, to the village of Riverside and to the city of Corning.

2. The village is an industrial community of considerable importance having within its limits the shops and foundry of the

Ingersoll-Rand Co., a manufacturer of air compressors, industrial compressors, engines, and other heavy machinery. The company presently employs a total of over 2,600 persons.

5. According to the 1930 Census the village had a population of 2,605 and it is estimated that the present population is now 2,700 persons composed largely of factory workers and their families. The village water system also serves the adjacent community of Riverdale which has a population of about 1,000.

6. The total assessed valuation of all taxable real property in the village limits is \$3,446,668 and the village has outstanding bonded indebtedness to an extent of \$31,000 none of which was issued for water supply purposes.

7. A public water supply system was first installed in the village of Painted Post as a municipal enterprise about 1909 under a decision of one of our predecessors, the State Water Supply Commission, on September 3, 1909 (Water Supply Application No. 65; 5th Report, Water Supply Commission, Page 434). The original source of water supply for this system consisted of four 6-inch wells, directly connected through a common suction line to two electric motor driven triplex plunger type pumps.

8. In 1941 production from the original wells became inadequate, a new 12-inch well with a capacity of 350 gallons per minute was developed in the northerly portion of the village. This project was approved by this Commission on November 29, 1941 (Water Supply Application No. 1908; 61 State Department Reports 745; Completed Works approved July 1, 1942). On February 6, 1947 the Commission approved of the construction of still another well located on the original pumping station property (Water Supply Application No. 1766; 67 State Department Reports 278; Completed Works approved May 5, 1948). This well has an 8-inch casing and is equipped with a pump of 350 gallons per minute capacity and it replaced all of the original wells and the triplex pumps.

9. From these wells water is pumped to a 100,000 gallon reservoir located in the northwesterly portion of the village and to the distribution system which consists of some 9.5 miles of pipe ranging from two to ten inches in diameter.

10. The village water system is interconnected, for emergency purposes only, with a 1,000 gallon per minute well located on the property of the Ingersoll-Rand Co. This connection was approved by this Commission on March 1, 1949 (Water Supply Application No. 1 83; 70 State Department Reports 154; Completed Works approved March 1, 1949).

11. The village also maintains an emergency connection for Civil Defense purposes with the city of Corning for use in the event either system should be destroyed by a major catastrophe. This connection has never been used and under normal operating conditions its use would be impractical.

10. During 1952 the peak daily demands on the system total water usage were as high as 700,000 gallons. At this time the peak for years to come is expected to increase to 800,000 gallons per day, due to increasing number of consumers, increasing consumption per capita, and heavier industrial demands. Average daily consumption is about 600,000 gallons. All consumers are served water through individual meters.

11. During prolonged dry weather periods when the ground water table has declined considerably, production from the village's larger well has decreased to as low as 700 gallons per minute. The smaller well draws from a aquifer containing much fine sand and under extremely dry conditions it has been necessary to shut down this well due to low pumping levels and to sand enterin, the well. In this situation the village is dependent on one single source, the capacity of which is limited to the extent that practically full 24-hour operation is necessary to meet the demand.

12. With both wells producing at maximum capacity, the peak demand of 800,000 gallons per day will require operation of both pumps for more than 11 hours per day. It is felt by the applicant's engineer that, for maximum efficiency, economical operation, and long life of equipment, the maximum period of operation should not exceed 6 to 8 hours per day.

13. It is readily apparent that in order to meet anticipated increasing demands, to maintain the required capacity during dry periods, and to provide a reasonable amount of standby capacity, an additional source of water supply is required and should be provided.

14. The carrying out and financing of this project was authorized by a resolution of the village board of November 14, 1952. The making of an application to the commission for approval of the project was also authorized on the same date.

15. Ward and Moore, a firm of consulting engineers with offices in the city of Corning, have been retained by the applicant as its engineers in connection with this project. Richard Ward of that firm appeared at the hearing and testified on behalf of the applicant.

16. In recent years the village has acquired land, in the lower-west section, to be developed into a park for recreational purposes. The new well now proposed is to be located on the easterly end of this land. A test well has been drilled at this location into a stratum of medium to fine gravel at a depth of 61 feet. This aquifer is covered by an overlying clay bed some 25 feet thick.

17. The well was test pumped for several hours at a rate of 700 gallons per minute with a draw down of 14 feet. After this test a sample of water was taken. A chemical analysis indicated it to be of a satisfactory quality for a public supply. As yet no bacteriological analyses have been taken although it is believed such analyses will be satisfactory.

14. It must be remembered that the quality of all samples of the water from this well be submitted to this Commission for approval before any such water may be used in the public water supply system of the village and thereafter such water may be used only after such treatment of it as may be required.

15. The Commission must also reserve the right to require the taking of additional sanitary precautions or the future treatment or purification of all water derived from this source of supply should future conditions indicate a need for so doing.

16. It is proposed to construct a double cased gravel packed drilled well with an installed pumping capacity of 700 gallons per minute. The outer casing is to be sealed against the wall of the drilled hole with cement grout into the tight clay formation. An electrically driven deep well turbine type pump of 700 gallons per minute capacity will be installed in the well.

17. The pump base and top of the well case will be at an elevation at least 2 feet above maximum known flood elevation and the pump house will be surrounded by suitable diversion ditches and embankments to prevent the entrance of surface water into the well.

18. The village presently owns all lands within at least 100 feet of the well. It must be required that no septic tanks, cess-pools, tile drainage fields or any other source of pollution shall be constructed or maintained within that distance.

19. No land is to be taken or acquired in connection with this project.

20. The plans and specifications submitted in connection with this application are satisfactory to the Commission.

21. The carrying out of this project will have no adverse effect on the water supply interests of any other municipality or civil division of the State.

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

COMMITTEE.

The Commission finds it necessary in order to protect the water supply and the interests of the applicant and of the inhabitants of the territory supplied by it with water and to protect the water supply and interests of any other municipal corporation or other civil division of the State and the inhabitants thereof, that the application, maps and plans submitted should be modified to conform to the following:

- a. Under this decision and approval the Village of Painted Post may construct and develop one additional well with an installed pumping capacity not in excess of 70 gallons per minute. This well shall be located on the plot of land shown on the map submitted in connection with this present application and entitled "General Plan-Additions to Water Supply."
- b. The village must retain control of all land within at least 100 feet of the well. Such land is to be used for water supply purposes only and no cesspool, septic tank, tile drainage field or any other source of potential pollution shall be constructed or maintained within such a distance.
- c. This area must further be protected from pollution by surface waters originating outside thereof by the construction of suitable diversion ditches or embankments and the development of the well itself must be so carried out that there shall be no opportunity for pollution entering the water in it.
- d. Before any water from this proposed well may be used for any purpose, after a prolonged pumping test, applicant shall have caused a sample of the water therefrom to be collected and analyzed, shall have submitted the results of such analyses to this Commission and shall have been advised by this Commission either that the water is of satisfactory sanitary quality or that certain specified treatment or purification thereof is necessary. In this last case such water shall be used only after full compliance with all of the requirements of the Commission.
- e. The Commission reserves the right to require the taking of further sanitary precautions or the further treatment or purification of the water from this source should conditions in the future indicate a need for such action.
- f. Unless the works authorized by this decision shall have been fully completed by July 1, 1938 or within such extended time as may have been

10. It must be required that the samples of the water drawn from this well be submitted to this Commission for approval before any such water may be used in the public water supply system of the village and thereafter such water may be used only after such treatment of it as may be required.

11. The Commission shall also reserve the right to require the taking of additional sanitary precautions or the future treatment or purification of all water derived from this source of supply should future conditions indicate a need for so doing.

12. It is proposed to construct a double cased drilled packed drilled well with an installed pumping capacity of 700 gallons per minute. The outer casing is to be sealed against the wall of the drilled hole with cement grout into the tight clay formation. An electrically driven deep well turbine type pump of 700 gallons per minute capacity will be installed in the well.

13. The pump base and top of the well casing will be at an elevation at least 2 feet above maximum known flood elevation and the pump house will be surrounded by suitable diversion ditches and embankments to prevent the entrance of surface water into the well.

14. The village property within 500 feet radius of front 200 feet of the well. It must be required that no septic tanks, cess-pools, tile drainage fields or any other source of pollution shall be constructed or maintained within that distance.

15. No land is to be taken or acquired for a well site until the project is in progress.

16. The plans and specifications submitted by applicant with this application are satisfactory to the Commission.

17. The carrying out of this project will have no adverse effect on the water supply interests of any other municipality or civil division of the State.

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

CONDITIONS

The Commission finds it necessary in order to protect the water supply and the interests of the applicant and of the inhabitants of the territory supplied by it with water and to protect the water supply and interests of any other municipal corporation or other civil division of the State and the inhabitants thereof, that the application, maps and plans submitted should be modified to conform to the following:

- A. Under this decision and approval the Village of Painted Post may construct and develop one additional well with an installed pumping capacity not in excess of 700 gallons per minute. This well shall be located on the plot of land shown on the map submitted in connection with this present application and entitled "General Plan-Additions to Water Supply."
- B. The village must retain control of all land within at least 100' east of the well. Such land is to be used for water supply purposes only and no cesspool, septic tank, tile drainage field or any other source of potential pollution shall be constructed or maintained within such a distance.
- C. This area must further be protected from pollution by surface waters originating outside thereof by the construction of suitable diversion ditches or embankments and the development of the well itself must be so carried out that there shall be no opportunity for pollution entering the water in it.
- D. Before any water from this proposed well may be used for any purpose, after a prolonged pumping test, applicant shall have caused a sample of the water therefrom to be collected and analysed, shall have submitted the results of such analyses to this Commission and shall have been advised by this Commission either that the water is of satisfactory sanitary quality or that certain specified treatment or purification thereof is necessary. In this last case such water shall be used only after full compliance with all of the requirements of the Commission.
- E. The Commission reserves the right to require the taking of further sanitary precautions or the further treatment or purification of the water from this source should conditions in the future indicate a need for such action.
- F. Unless the works authorized by this decision shall have been fully completed by July 1, 1934 or within such extended time as may have been

applied for and granted by the Commission, then and on that date this decision shall be deemed to have lapsed and to be of no further force and effect.

6. Nothing in this decision and approval contained shall be held to abrogate the provisions of Section 341 of the Conservation Law, which forbid the operation of any of these works until as constructed they have been approved by the Commission. Such final approval will be given only on due petition therefor. In general such approval will not be given except for a fully completed system, and it never will be given until all provisions affecting quality of the water and safety of the works fully have been complied with.

STATUTORY AUTHENTICATIONS

The Water Power and Control Commission, having given due consideration to the said petition and its exhibits and the proofs and arguments submitted at the hearing, determines and decides as follows:

First. That the application, maps and plans submitted are modified as set forth above and, as so modified, are the plans hereinafter mentioned.

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

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

Fourth. That said plans provide for the proper protection of the supply and the watershed from contamination and that filtration at the present time is unnecessary.

Fifth. 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.

Sixth. 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.

DECISION

WHEREAS, the Water Power and Control Commission does hereby approve the said application, maps and plans of the Village of Palatine Park, as thus modified.

I, WILFRED MCKEEAN, the Water Power and Control Commission has caused this determination and approval to be signed and 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 12th day of June, 1950.

WATER POWER AND CONTROL COMMISSION

JOHN F. DALY
Secretary to the Conservation Department,
Alternate - Acting Chairman

(L.S.)

EDWARD F. GIBSON
Chief Engineer, Department of Public Works
Alternate

RICHARD H. SHIFF
Assistant Attorney General, Alternate

Attest:

J. C. McKEAN
Secretary to the Commission