

PHONE 27-545

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The Guarantee Laundry Machinery Co.

ESTABLISHED 1899

SUCCESSORS TO

THE GUARANTEE IRON AND DROP FORGING CO.

R. M. CORAM, GENERAL MANAGER

MANUFACTURERS OF
LAUNDRY & DRY CLEANING MACHINERY

WINNIPEG

5th fl. Victoria Bldg.
126 Lombard St.
Winnipeg, Man.

Department of Indian Affairs,
Ottawa, Ont.

Attention-Mr. R. J. Orr.

Dear Sirs:

We have been working with Wyndel's Construction Company, 654 Aulneau St., St. Boniface, Man, in connection with the Laundry Machinery for the new Indian School at Kenora.

For some reason apparently our Factory the, Guarantee Laundry Machinery Co., Winnipeg, have never been successful in getting an installation in one of your Schools.

We are most anxious to get started with you, and have quoted prices, on this instances that are very favorable, and are prepared to put in the Machinery on a basis whereby it can be thoroughly tried out over a reasonable period of time, so you would know that it will do all we claim it will.

The Guarantee Laundry Machinery Co., are manufacturing Laundry Machinery exclusively, and have in operation many thousands of dollars worth of Machines, all of which are giving absolute satisfaction.

If you have a representative here that could act for you we could show him quite a few installations here in Winnipeg, and he could inquire himself, as to whether they were satisfactory to the users or not.

It seems to ~~me~~ us that it would be a mighty good proposition for the Government to have a business connection at Winnipeg for the reason that any service that was required could be given promptly and at a minimum of expense for travelling etc.

Indian Affairs. School Files.
(RG 10, Volume 6188, File 461-5, part 2)

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CANADA

PHONE 27-545

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The Guarantee Laundry Machinery Co.

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R. M. CORAM, GENERAL MANAGER

MANUFACTURERS OF
LAUNDRY & DRY CLEANING MACHINERY

WINNIPEG

5th Fl. Victoria Bldg.,
126 Lombard Street,
November 26, 1928.

Department of Indian Affairs,
Ottawa, ONT.

Attention-Mr. R. J. Orr.

Dear Sirs:

Wrote you on November 10th, in regard to Laundry Machinery for the new Indian School, at Kenora. We are rather anxious to have the opportunity of quoting on this, and would appreciate very much hearing from you by return, if convenient.

Yours very truly,

THE GUARANTEE LAUNDRY MACHINERY CO.,

J. G. Smith/WC

per *[Signature]*

Indian Affairs. School Files.
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139-3-15

Dec. 3, 1928.

Sir,

Replying to your letter of the 26th ultimo regarding the laundry machinery specified for the proposed new Indian Residential School near Kenora, I beg to say that no request has been received from the contractor to use the machinery manufactured by your company.

1/2

Your obedient servant,

J. D. McLean
J. D. McLean.
Assistant Deputy and Secretary.

[Signature]
The Guarantee Laundry Machinery Co.,
5th Fl. Victoria Bldg.,
126 Lombard Street,
Winnipeg, Man.

[Signature]

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129-3-15

Dec. 3, 1928.

Sir,-

Replying to your letter of the 28th ultimo with reference to the new Cecilia Jeffrey Indian Residential School, I beg to say that it is not the intention to do anything in connection with the barn until next spring.

It is not thought necessary to provide transoms for the staff bedrooms.

When the blackboards are being installed you can arrange with Mr. Hudson to have them erected at the proper height.

With regard to the drain the floor of the laundry this should be provided.

Regarding the trap in the passage in front of the bakery and in the kitchen or scullery, also the providing of a larger pipe from the infirmary you should have Mr. Hudson obtain a price from the contractors and submit same for consideration.

Your obedient servant,

J. D. McLean.
Assistant Deputy and Secretary.

Frank Edwards, Esq.,
Indian Agent,
Kenora, Ont.

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Dec. 3, 1928.

Sir,-

Replying to your letter of the 21st ultimo, with reference to the employment of Mr. Hudson as Inspector of Construction, I beg to say that it was originally thought that two days a week would be sufficient for the inspection of this work, but on further consideration it was thought advisable that more time be spent by Mr. Hudson in order to be sure that the building is being erected in accordance with the plans and specifications, and he was, therefore, advised to make the number of inspections he thought necessary.

I note your last paragraph with reference to the cost to Mr. Hudson of transportation to and from the School. If he is actually paying for transportation the Department will allow for same providing he submits a voucher in duplicate to you each month covering the cost of these charges. This amount should be included in your voucher for his salary attaching to the voucher receipts for transportation.

Your obedient servant,

J. D. McLean.
Assistant Deputy and Secretary.

Frank Edwards Esq.,
Indian Agent,
Kenora, Ont.

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Vote No.....

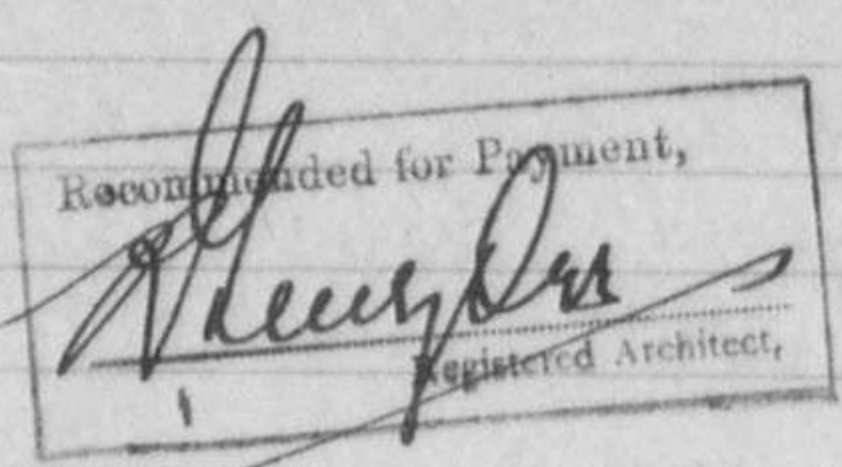
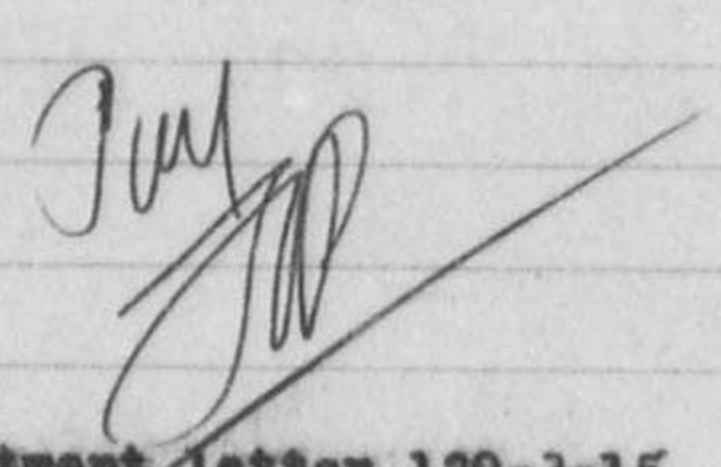
Treaty No.....3

DEPARTMENT OF INDIAN AFFAIRS

To.....G. H. Hudson.....

Kenora,

Ont.

DATE	SERVICE	AMOUNT
1928		
Nov.		
Dec. 3	To inspection of construction of new Cecelia Jeffrey Indian Residential school, Kenora, for month of November -- 26 days @ \$ 6.00	\$156 00
	<div data-bbox="611 1085 1070 1342"> <p>Recommended for Payment,</p>  <p>Registered Architect,</p> </div>	
4388	<div data-bbox="808 1370 1201 1627">  </div> <p>Authority Department letter 129-3-15 October 16th./28.</p> <p>5329 for Dec 12/28.</p>	
	TOTAL,	

I HEREBY CERTIFY that this Voucher is correct, that the material has been supplied, the work performed and that the charges are fair and just; also that the expenditure has been incurred legitimately and that each item of the same is a fair and just charge against the Government of Canada.

Form 52.

Bank Edwards
Agent.

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K E N O R A

AGENCY

DIARY FOR THE MONTH OF NOVEMBER 1928.

Inspection of new Cecelia Jeffrey Indian Residential School.

1	To inspection of school	-- pouring cement
2	" " " "	-- electric tubing
3	" " " "	-- pouring cement
4	Sunday	
5	To inspection of school	-- plumbing
6	" " " "	-- pouring XXXXXX concrete floor.
7	" " " "	-- with Indian Agent Edwards.
8	" " " "	-- pouring cement floor
9	" " " "	-- " " "
10	" " " "	" " "
11	Sunday	
12	To inspection of school	-- general inspection
13	" " " "	-- tinsmithing on roof
14	" " " "	-- " " "
15	" " " "	-- " " "
16	" " " "	-- general
17	" " " "	-- "
18	Sunday	
19	To inspection of school	-- general
20	" " " "	"
21	" " " "	"
22	" " " "	"
23	" " " "	"
24	" " " "	"
25	Sunday	
26	To inspection of school	-- general
27	" " " "	"
28	" " " "	"
29	" " " "	"
30	" " " "	-- With Indian Agent Edwards.
31		

Form No. 79

G. H. Hudson
Inspector.

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CERTIFICATE

Department of Indian Affairs

Certificate No. 3

3rd December 1928

\$

I hereby Certify that Wyndells Construction Company
 has supplied material and performed labour on the Cecilia
Jeffrey Indian Residential School
 Contract for work
 entitling them to a third payment of \$12636.00
 dollars.

Certificate No. 1. \$ 15912.00 Contract \$ 80843.60

" 2 12371.94 Extras

" 3 12636.00 "

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Recommended for Payment,
W. Wyndells
 Registered Architect.

Total

Labour and material in building at first certificate \$ 17680.00

additional at 2nd " 13746.60

" 3rd " 14040.00

" 4th "

" 5th "

Labour and material required to complete contract \$ 35377.00

Signature G. H. Hudson

Received payment

Form No. 219

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Kenora, Ontario
Winnipeg, *Nov. 30* 192*8*

Architect

Dear Sir:

Application is herewith made for Progress Estimate No. *III* in connection with the

Indian Res. School Job. Estimate is made up as follows:

TRADES	Contract Price	Value of Work done to date	Amount or estimates received	Amount of present application
Excavation	1523 60	1523 60	1523 60	
Sewer and Drains				
Concrete Footings and Foundation Walls	4202	4202	4202	
Rubble Masonry				
Cut Stone Work				
Brick Work & Stone	6293	1300	1300	
Concrete Floor Slabs and Columns throughout	2584	1500	1500	
Iron Reinforcing Bars	521	521	521	
Lath and Plastering	4700	1000		1000
Carpenter and Joiner	27065	19200	17200	2000
Hardware	1500	440	320	120
Electric Wiring	2500	1600	1100	500
Plumbing & Heating	16700	8510	1710	6800
Tin & Gal. Iron & Roofing	5800	4800	1400	3400
Painting and Glazing	3700	520	300	220
Iron and Steel Work	1400	350	350	
Tile or Other Flooring				
Blinds & Blackboards	502			
Laundry Machines	1850			
Total Contract Price	\$80843.60	\$45466.60	\$31426.60	\$14040.00

Extras

Yours Truly,
WYNDELS CONSTRUCTION CO., LTD

Per

Indian Affairs. School Files.
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ARCHIVES PUBLIQUES
CANADA

POOR
COPY

108-13

Kenora, Ont.
December 3rd./28.

Sir:-

Attention Mr. R. Gurney Orr

Enclosed please find certificate of Wyndels Construction Co. on the new Cecelia Jeffrey Indian Residential school.

The weather is still keeping favourable and there is no snow on the ground. All the outside work is finished except the brick veneer. They are now busy lathing. The boilers are now in place, and as soon as heat can be turned on the plastering can be done.

I would like to make a few suggestions, which I have talked over with Mr. Wyndels and the Indian Agent. They are as follows;

In the attic, the chapel and the rear part of the building the ceilings are exposed as there is no building paper mentioned in the specifications. I would suggest that this be put in.

In the Principal's residence, where only plaster is specified on the ceilings, I would recommend that the upper ceiling be covered with one ply of ship lap, building paper and strapping. The Indian Agent suggests that this might do away with the snow and ice gathering on the roof and sliding, as it did at the Sioux Lookout school.

As the ceilings below all the verandahs are exposed through having the grade lower than the actual plans, I would recommend that they be covered with T and V joint. Owing to their height the underpart is very noticeable and this would give them a more finished appearance.

The work is going ahead fast and everything is in good order.

Your obedient servant

R. G. Hudson
Inspector.

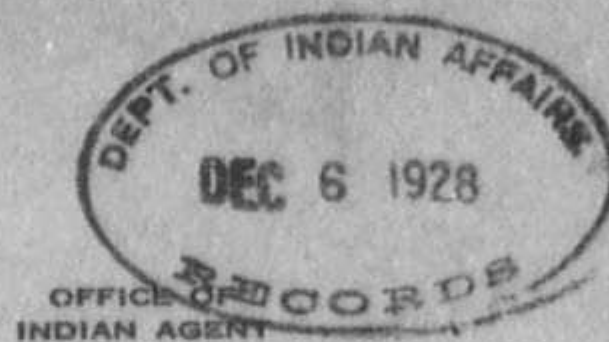
The Asst. Deputy & Secretary,
Dept. of Indian Affairs,
Ottawa.

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129-3-15

DEPARTMENT OF INDIAN AFFAIRS
CANADA



108-13

[Handwritten signature and initials]

Kenora, Ont.

December 3rd./28.

Sir:-

Enclosed please find Inspector Hudsons certificate number 3 in favour of the Wyndels Construction Co. for work at the new Cecelia Jeffrey Indian school; also inspector's report and diary together with voucher for his salary.

Your obedient servant,

[Handwritten signature: Rankin Edwards]
Indian Agent.

E/S

The Assistant Deputy & Secretary,
Dept. of Indian Affairs,
Ottawa.

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DEPARTMENT OF INDIAN AFFAIRS
CANADA



R

OFFICE OF
INDIAN AGENT



108-13

Kenora, Ont.
December 6th./28.

Sir:-

Attention R. G. Orr Esq.

While on an inspection trip to the new Cecelia Jeffrey Indian school yesterday it was brought to my attention that it was specified for a fire alarm signal to be placed in the office, and in one room to be designated on each of the other floors.

I have given authority for this to be changed so that the alarm can be rung from a central position in the passage of each floor, instead of in rooms as designated in the specifications. The reason for this is that should a fire occur at night, the office or other rooms might be locked, and this would cause considerable delay in an alarm being given. The alarm signals will be placed fairly high so that the smaller children cannot reach them.

I have also given instructions for them to run an electric light wire down into the basement of the principal's residence, so that an attachment can be connected as there are no lights shown in this basement.

These instructions were issued yesterday without authority as work would have progressed too far to have these changes made, after the proper authority could have been obtained.

Your obedient servant,

Frank Edwards

Indian Agent.

The Assistant Deputy & Secretary
Dept. of Indian Affairs,
Ottawa.

E/S

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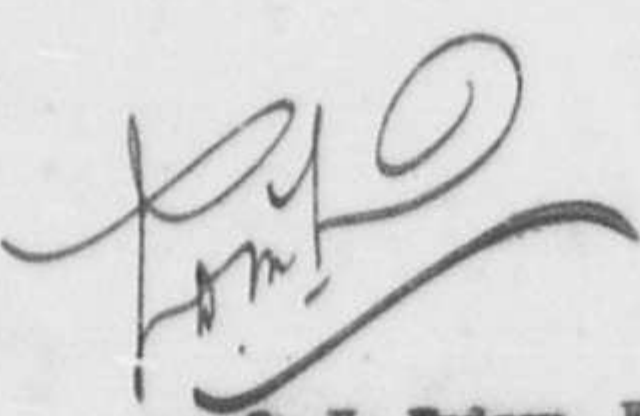
Dec. 14, 1928.

Sir,-

Replying to your letter of the 3rd instant, with reference to the new Cecilia Jeffrey School, you may instruct the contractor to cover the ceilings in the attic, chapel and the rear part of the building with Johns Manville Houseline, similar to that specified for the outside walls. You may also have some material put on the ceiling under the strapping of the Principal's residence, and instruct the contractor to provide v-joint sheeting on the underside of the verandahs.

Your obedient servant,

J. D. McLean.
Assistant Deputy and Secretary.



G. H. Hudson, Esq.,
Inspector of Construction,
Indian Residential School,
Kenora, Ont.

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1245



DEPARTMENT OF THE INTERIOR, CANADA
DOMINION WATER POWER AND RECLAMATION SERVICE

REPORT ON
WATER SUPPLY
AND
SEWAGE DISPOSAL SYSTEMS
FOR
CECILIA JEFFREY INDIAN SCHOOL
DISTRICT OF KENORA
ONTARIO.

Winnipeg, Manitoba,
November 30th, 1928.

E. B. Patterson.

Indian Affairs. School Files.
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89231 W

28782-w

706 Commercial Building,

Winnipeg, November 10, 1928.

REPORT ON

WATER SUPPLY
District of Kenora,
Dominion Water Works and Sanitation Service,
AND

SEWAGE DISPOSAL SYSTEMS

for the purpose of submitting a
report, prepared at the request of the Department of

Indian Affairs, covering proposed water supply and
CECILIA JEFFERY INDIAN SCHOOL
sewage disposal systems for the new Cecilia Jeffery
Indian School, **DISTRICT OF KENORA** location near
Kenora, Ontario.

ONTARIO.

Alternative water supply systems are
submitted for selection although there is no doubt as
to which is the better system for service and fire
protection. Where a school is very remote, other
factors may govern the selection, but such should not be
the case in this instance.

Your obedient servant,

Winnipeg, Manitoba,
November 30th, 1928.

E. B. Patterson

E. B. Patterson.
Assistant Water Development Engineer.

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Winnipeg, November 30, 1928.

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C. H. Attwood, Esq., C. E., District Chief Engineer, Dominion Water Power and Reclamation Service,	2
Sewage Disposal.	4
Sir, -	

I have the honour to submit herewith a report, prepared at the request of the Department of Indian Affairs, covering proposed water supply and sewage disposal systems for the new Cecilia Jeffrey Indian School which is now under construction near Kenora, Ontario.

Alternative water supply systems are submitted for selection although there is no doubt as to which is the better system for service and fire protection. Where a school is very remote, other reasons may govern the selection, but such should not be the case in this instance.

Your obedient servant,

E. B. Patterson
E. B. Patterson,

Assistant Power Development Engineer.

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Estimates	

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Sewage Disposal System Profiles	3
Details of Manholes	4
Septic Tank	5
Details of Laundry Sump	6
Pump House Details.	7
Water Tank & Tower.	8
Pressure-Tank House	9

The alternative water systems are:

- A - Gravity Tank System.
- B - Pressure Tank System.

It is anticipated that the water will have to be chlorinated in order to ensure that it will be safe at all times for domestic use. For this reason a chlorine tank and associated equipment has been included in the

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estimates. It will be attached to the suction main and automatically operated when the pump is working.

A - Gravity Tank System.

INTRODUCTORY. The layout of the proposed gravity system is shown on Plans. The new Cecilia Jeffrey Indian Residential School, now under construction, is located some three miles north-east of the town of Kenora, Ontario. This report outlines alternative water supply systems and a sewage disposal system for the school. Plans and profiles of the proposed works, together with estimates of the cost, are included in this report. The elevations given on the plans and profiles are to an assumed datum. The reference bench mark is elevation 100.00 and is located on a rock outcrop on the east boundary of the property, 290 feet south of the north-east corner.

WATER SUPPLY.

General.

The school is situated some 600 feet from, and 60 feet above Round lake, which is the proposed source of supply. Round lake has an area of about 100 acres and is said to be from 60 to 90 feet deep.

The alternative water supply systems are designed to fully supply the domestic demand of over 100 inmates and give a limited fire protection. Electric power for operating pumps, etc., will be supplied from the Kenora Municipal System. The alternative water systems are:

- A - Gravity Tank System.
- B - Pressure Tank System.

It is anticipated that the water will have to be chlorinated in order to ensure that it will be safe at all times for domestic use. For this reason a Wallace & Tiernan vacuum type chlorinator has been included in the point under the water tower, to which may be connected a fire hose connection if desired.

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estimates. It will be attached to the suction main and automatically operates when the pump is working.

A - Gravity Tank System.

The layout of the proposed gravity system is shown on Plate No. 1, and a profile on Plate No. 2. The intake, which is provided with a standard cast-iron strainer and foot valve, is to be placed in deep water some 250 feet out from the shore. The pump house is located near the foot of the bank and 150 feet from the lake. The force main is some 800 feet in length and leads to an elevated tank situated back of the school. The maximum water level in the tank is 135 feet above the level of the lake and the discharge outlet of the pump is to be placed 14 feet above the suction level.

The pumping equipment recommended for the gravity supply is a Fairbanks Morse, No. 4371, self-oiling, typhoon power pump, belted to a five horse power, ball bearing, squirrel cage motor, both mounted on a steel base. The pump has a maximum working pressure of 65 pounds and a capacity of 4167 imperial gallons per hour. For controlling pumping operations, the proposed installation provides for a Cutler Hammer, four-pole, float switch.

The suction and force mains are four-inch pipe. The estimated cost is based on black pipe. If galvanized pipe is desired the difference in cost must be added to the estimates. The force main is to be anchored at the elbows under the pump house and water tower by concrete collars and provided with a check valve above the pump and a relief valve below the water tank near the ground level. The force main is to be provided with six Dart unions, spaced about equal intervals, also a "Y" bend with plug, at a convenient point under the water tower, to which may be connected a fire hose connection if desired.

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The proposed pump house is a 12' x 14' frame structure covered with galvanized sheet iron and lined with insulite. Details of the pump house and the pump base are shown on Plate No. 7. A stove for heating the pump house has been included in the estimates.

The proposed water tank is to be constructed of wood staves and is to be 11 feet 6 inches in diameter and 16 feet high. The capacity of this tank is 9,100 imperial gallons at a height of two feet below the top. Over the entrance of the force main into the tank, a metal umbrella is to be placed to deflect the force of the water entering the tank. The tank is to be placed on a sixty feet, timber tower with concrete footings. The water tank and force-main riser are to be housed and at the base a house for heating the pipe and tank is to be constructed. Details of the above structures are shown on Plate No. 8. A stove for the house has been included in the estimates.

B - Pressure Tank System.

The location of the pump house, suction and force mains for the proposed pressure tank system would be the same as for the gravity supply except that before reaching the location of the proposed water tank of the gravity system, the force main would lead to a building at the back of the school in which the pressure tank is to be housed. A much greater measure of fire protection is possible with the pressure tank system and consequently the pumping rate has been doubled and the pumping pressure increased from 65 pounds to 100 pounds. As a consequence the suction main must be increased from a four inch pipe to a five inch pipe.

The pumping equipment recommended for this service is two complete units of Fairbanks Morse No. 4372, self oiling, typhoon power pump mounted on a steel base and

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belted to a 7½ h.p. ball-bearing, squirrel-cage motor. These pumps have a maximum working pressure of 100 pounds and a combined capacity of 8,334 imperial gallons per hour. For controlling pumping operations the proposed installation provides for a Cutler Hammer automatic motor-starter, and Cutler Hammer pressure regulator. For general pumping operations only one pump need be used. Consequently this layout has the added advantage of a spare pumping unit which could be utilized in case one pump was shut down for repairs, thus assuring a more reliable service.

Water Tank A pneumatic pressure tank four feet by sixteen feet is recommended. The proposed range of pressure in the tank is from 50 to 85 pounds and the pressure for domestic service 20 pounds. The air compressor recommended is a Curtis, single-stage compressor, size 3 x 3½, which will be motor driven. The compressor and motor will be mounted on a single base.

The building for housing the pneumatic pressure tanks is to be located back of the chapel and the details of construction are shown on Plate No. 9. The foundations of the building are to be carried down to the same elevation as the school and above ground, the walls are to be of the same brick as used in the construction of the school.

SEWAGE DISPOSAL.

General.

As previously noted, the school is situated 600 feet from and 60 feet above Round lake, the source of the water supply. The school is situated on a sandy hillside with rock outcropping farther back. The drainage, surface and sub-surface of the land surrounding the school is into Round lake. It is therefore necessary to treat the sewage effectively.

The general method of treatment, septic tank and disposal bed, was selected as best suited to give continuous service with a minimum of attention.

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Laundry Waste.

The laundry waste is to drain into a sump located as shown on Plate No. 1 from which it will seep, filtering naturally through the sand and gravel subsoil.

A six-inch cast-iron soil pipe carries the waste from the school to a manhole marked "B" on Plate No. 1, details of which are shown on Plate No. 4. From this manhole a six-inch glazed pipe is laid for a distance of 76 feet to the laundry sump.

Septic Tank and Syphon Chamber.

The sewage, other than laundry waste, leaves the building through a six-inch cast-iron pipe to a manhole marked "A" on Plate No. 1, thence through a six-inch glazed pipe to the septic tank. As shown on Plate No. 5, the septic tank and syphon are contiguous and are to be constructed of concrete, of 1 : 2 : 4 mix and finished with a waterproofing coat of 1 : 1 mortar. To secure protection from frost a double plank roof with a six-inch air space is provided.

The septic tank itself is seven and a half feet wide, seventeen feet long and six feet high at the centre. Two manholes are provided, one at the inlet end and the other over the syphons. The effluent enters the tank through a six-inch cast-iron pipe and by means of a tee connection and a short length of pipe is carried one foot below the sewage line, in order to avoid disturbance of the surface scum.

From the septic tank the sewage flows over the dividing wall to the syphon chamber, two baffle boards carried one foot below the sewage line preventing any undue disturbance.

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From the syphon chamber the sewage is discharged through two three-inch "Anthes" automatic syphons into a six inch glazed tile pipe connected directly to the headers of the disposal bed.

Disposal Bed.

The soil at the site of the disposal bed is sand interspersed with layers of fine gravel, all excellent material for the bed. The elevation of the tile is shown on Plate No. 3 and the finished surface grade is designed to give an overburden of eighteen inches.

From the header the effluent is distributed over the bed through twenty branches, each 80 feet long, of four-inch field tile laid with open joints. Over these joints a strip of tarpaper is to be placed to prevent sand filtering in and blocking the tile.

Manholes.

The location of the two manholes, as shown on Plate No. 1, provide sufficient access to the system. As shown on Plate No. 4, the manholes are to be constructed of concrete, with the exception of the roof, which is to be made of two thicknesses of two-inch plank. Each manhole has a two-foot-square cast-iron cover.

Manhole "A" at the inlet to the septic tank is provided with an iron screen, see Plate No. 4, in order to prevent any articles, not intended, reaching the septic tank.

Recommendations Re Operation.

Though the proposed sewage disposal plant requires less attention than any other approved method of treatment, the following matters must be attended to in order to ensure successful and continuous operation:

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(1) In order to assist the setting up of bacterial action a solution of yeast cakes, four to a pail of tepid water should be put in the septic tank when the system is first put in operation.

(2) If started up during cold weather plenty of hot water should be flushed into the tank.

(3) Do not allow disinfectants to enter the tank or septic action will be destroyed.

(4) Protect the tank and disposal field by covering over with a foot of damp straw or manure.

(5) No trap must be placed between the ventilating stack in the school and the septic tank. Otherwise the necessary supply of air to the system will be cut off.

E. B. Patterson
E. B. Patterson.

Winnipeg, Manitoba,
November 30th, 1928.

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ESTIMATES FOR THE REPAIR AND IMPROVEMENT OF THE WATER SUPPLY SYSTEM

Section Main.		
Excavating, trenching, laying & backfilling		\$2,500.00
Section Main.		
Excavating, trenching, laying & backfilling		540.00
Section Main.		
Excavating, trenching, laying & backfilling		1,800.00
Section Main.		
Excavating, trenching, laying & backfilling		430.00
Excavating, trenching, laying & backfilling		457.00
Excavating, trenching, laying & backfilling		18.00
Excavating, trenching, laying & backfilling		48.00
Excavating, trenching, laying & backfilling		48.00
Excavating, trenching, laying & backfilling		45.00
Excavating, trenching, laying & backfilling		53.00
Excavating, trenching, laying & backfilling		53.00
Excavating, trenching, laying & backfilling		1,105.00

ESTIMATES.

Section Main.		
Excavating, trenching, laying & backfilling		5,900.00
Section Main.		
Excavating, trenching, laying & backfilling		570.00
Section Main.		
Excavating, trenching, laying & backfilling		1,500.00
Excavating, trenching, laying & backfilling		200.00
Excavating, trenching, laying & backfilling		1,700.00
Excavating, trenching, laying & backfilling		405.00
Excavating, trenching, laying & backfilling		112,770.00

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**ESTIMATED COST
OF
GRAVITY TANK SYSTEM.**

<u>Delivery Main.</u>		
Trenching, laying & backfilling		\$2,500.00
<u>Force Main.</u>		
Trenching, laying & backfilling		840.00
<u>Suction Main.</u>		
Unwatering, trenching, laying & backfilling		\$2,800.00
12" x 14" black pipe, 800 ft. of 4 in.		1,350.00
connections & fittings		840.00
<u>Force Main.</u>		
Trenching, laying & backfilling		
supplying		1,350.00
1200 feet of 4 in. black pipe, connections & valves		
<u>Pump House & Equipment.</u>		
12' x 14' Pump house and stove	\$ 430.00	
1 Pump outfit No. 4371, Fairbanks Morse	437.00	
1 - 24" Iron body swing check valve, threaded	12.00	
1 Cutler Hammer float switch	45.00	
1 Pressure Chamber	40.00	1,962.00
1 By-pass valve, connections & labor	45.00	
installing & connecting	58.00	
Freight & hauling	38.00	1,105.00
Reservoir & Equipment.		
Wood stave tank, tower, house and stove	5,000.00	
<u>Pole Line.</u>		
School to pump house to tank	570.00	
<u>Chlorinator.</u>		
Wallace & Tiernan vacuum type	\$ 1,500.00	
Freight, installing & contingencies	200.00	1,700.00
<u>Contingencies.</u>		405.00
		<u>\$13,770.00</u>

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ATE No 1.

ESTIMATED COST
OF
PRESSURE TANK SYSTEM.

<u>Injection Main.</u>		
trenching, laying & backfilling		\$2,800.00
<u>Force Main.</u>		
trenching, laying & backfilling		840.00
<u>Supplying.</u>		
100 ft. of 5 in. black pipe, 900 ft. of 4 in.		
black pipe, connections & fittings		1,500.00
<u>Pump House & Equipment.</u>		
Pump house and stove	\$500.00	
2 pumps, Outfit 4372, Fairbanks Morse.....	916.00	
Cutler Hammer automatic motor starter		
& Cutler Hammer pressure regulator.....	203.00	
pressure chamber, connections & labor...	45.00	
By pass valve, connections & labor.....	50.00	
freight and hauling.....	148.00	
installing and connecting	100.00	
		1,962.00
<u>Reservoir & Equipment.</u>		
Pneumatic pressure tank 5/16", 48" x 16'	400.00	
Air compressor, 3 x 3 1/2 & 1 h.p. motor,		
mounted.....	218.00	
all necessary pipes, valves, gauges, etc..	150.00	
installing & connecting.....	300.00	
pressure-tank house, with heating coils...	700.00	
		1,768.00
<u>ole Line.</u>		
School to pump house		720.00
<u>Chlorinator.</u>		
Hallace & Tierman vacuum type.....	1,500.00	
freight, installing & contingencies.....	200.00	
		1,700.00
<u>Contingencies.</u>		460.00
		<u>\$11,750.00</u>

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ESTIMATED COST
OF
SEWAGE DISPOSAL SYSTEM.

Septic Tank and Syphon Chamber.

144 cu. yds. excavation @ \$1.00.....	\$ 144.00	
22 " concrete @ 20.00.....	440.00	
1400 F.B.M. Lumber.... @ 49.00.....	69.00	
Twin "Anthes" syphons, fittings	130.00	
and manhole covers.....	20.00	
Freight and Hauling.....	52.00	\$ 855.00
Labor.....		

A and B Manholes. 120.00

Disposal Bed.

626 cu. yds. excavation @ .50¢.....	313.00	
1600 feet of 4" tile laid	320.00	
and covered @ .20¢.....	33.75	
25 feet of glazed tile @ 1.35.....		
76 feet of glazed tile with	114.00	
Y branches @ 1.50.....	1.25	
1 roll tar paper.....		
220 cu. yds. levelled overburden	110.00	892.00
@ .50¢.....		

Laundry Drain and Sump...... 350.00

Contingencies...... 283.00

\$2,500.00

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PLATE No. 1.

GENERAL
PLAN

WATER SUPPLY
&
SEWAGE DISPOSAL

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Department of the Interior, Canada
DOMINION WATER POWER & RECLAMATION SERVICE

CECILIA JEFFREY INDIAN RESIDENTIAL SCHOOL
KENORA, ONT.

WATER SUPPLY
&
SEWAGE DISPOSAL SYSTEMS

Scale 40 Feet to One Inch

Winnipeg District Office
Nov. 1926.

Chattwood
District Chief Engineer

PREPARED FOR DEPARTMENT OF INDIAN AFFAIRS

