SEVENTY-FIFTH LEGISLATURE

SENATE

NO. 177

In Senate, March 8, 1911. Reported by Mr. Mullen from Committee on Ways and Bridges and ordered printed under joint rules. W. C. HANSON, Secretary.

STATE OF MAINE

RESOLVE, in favor of a highway bridge over St. John River between Van Buren, Maine, and St. Leonards, New Brunswick.

WHEREAS the seventy-fourth legislature by resolve entitled as above appropriated the sum of thirty-seven thousand five hundred dollars (\$37,500.00) to meet one-half the cost of constructing a highway bridge over the St. John river, between the towns of Van Buren, Maine, and St. Leonards, New Brunswick, provided the Province of New Brunswick or the Dominion of Canada furnished and expended an amount sufficient to meet one-half of the cost of construction of said bridge.

WHEREAS, the Dominion of Canada made a similar appropriation which became available in 1910.

WHEREAS, it was impossible to start construction before September twenty-third, 1910, and on that account it was im-

SENATE-No. 177.

possible to complete said bridge prior to the thirty-first day of December, 1910, and in consequence a large part of the original appropriation lapsed on December thirty-first, 1910, to wit: the sum of twenty thousand six hundred thirty-eight dollars and forty-six cents (\$20,638.46).

WHEREAS, the foundation work on said bridge has been more expensive than anticipated and the completed work will cost about ten thousand dollars (\$10,000.00) more than originally estimated, be it

Resolved: That the sum of twenty-three thousand six hun-2 dred thirty-eight dollars and forty-six cents (\$23,638.46) be 3 and hereby is appropriated to meet the payments of one-half 4 the contracts outstanding and unpaid and other incidental 5 work in connection with the completion of this bridge.

STATEMENT OF FACTS.

Under a resolve of the last legislature the sum of thirty-seven thousand five hundred dollars, one-half in the year nineteen hundred nine and one-half in the year nineteen hundred ten was appropriated to meet one-half the cost of constructing a highway bridge over the St. John River, between the towns of Van Buren, Maine, and St. Leonards, New Brunswick, provided the Province of New Brunswick or the Dominion of Canada furnish and expend an amount sufficient to meet one-half the cost of construction of said bridge.

The Dominion Parliament did not make appropriation for this purpose until 1910.

S. J. Chapleau, District Engineer, Department Public Works, representing the Dominion and the State Commissioner of Highways, entered into and completed preliminary arrangements for starting the work in June and July. Tenders were called on the construction of both substructure and super-structure on September ninth.

The general form of super-structure decided on was a through truss bridge of about 762 feet between back walls, consisting of three 143-foot spans and one 322-foot span, c. to c. of end bearings.

Roadway to be 22 feet wide with one foot walk six feet wide. Headway to be 15 feet in the clear. Bridge is designed for a moving load of a ten-ton wagon on two axles ten feet apart and six-foot gauge and a twenty-four-ton street car on two axles seven feet, moving abreast of each other; or for a uniformly distributed load of one hundred pounds per square foot of roadway and sidewalk.

Specifications for masonry called for prices on both cement stone masonry and concrete.

The following bids were received:

SUPERSTRUCTURE.

| Canton Bridge Co., Canton, Ohio | \$51,082 00 |
|-------------------------------------|-------------|
| Boston Bridge Co., Boston, Mass | 47,452 00 |
| Penn Steel Co., Boston Office | 54,400 00 |
| American Bridge Co., New York City | 50,000 00 |
| Penn Bridge Co., Beaver Falls, Penn | 40,991 00 |

| | Ist class masoury. | 2nd class masoury. | 1-3-6 under water. | 1-2-4 under water. | 1–3-6 above water. | 1-2-4 above water. | Rip rap under water. | Rip rap above water. | Excavation under water. | Sheet piling. | Piles driven. | SENA' |
|---|-----------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------|----------------------------|-------------------------------|------------------|------------------|------------|
| J. L. Parkin & Son, Fairfield, Me | \$ 26 50 | \$19 50 | \$13 55 | \$ 15 60 | \$10 50 | \$12 50 | \$8 00 | \$ 8 00 | \$3 25 | $38\mathrm{M}$ | .50 | TE- |
| Elie Roy, Lewiston, Me | 15 30 | 11 80 | 9 10 | 10 15 | 8 80 | 9 50 | 3 50 | 3 40 | 1 00 | $40 \mathrm{M}$ | .45 | Ļ |
| Powers & Brewer, Grand Falls, N. B | 14 50 | \cdot 12 50 | 12 00 | 13 00 | 8 75 | 10 25 | 2 50 | 1 75 | 2 50 | 40 M | .32 | <u>ю</u> . |
| E. G. O'Kelly, Toronto, Ont | 20 00 | 12 00 | 12 00 | 12 50 | 8 50 | 11 50 | 2 50 | 1 75 | 2 00 | 65M | . 90 | 177 |
| 1. Elie Roy, \$22,254 00 2. Powers & Brewer, 23,895 50 | | . O'Kelly, kin & Son, | | 5.145 00 0,598 50 | | • | | | | | | • 1 |

.

SUBSTRUCTURE.

٠

•

.

4

The bid of Elie Roy was thrown out on account of check not being certified and two of the items submitted by him not being as called for in the specification.

A few days before bids were opened, September ninth, the U. S. War Department notified the state commissioner that on account of the international character of the bridge it would be necessary to obtain the consent of Congress before proceeding with the construction. On this account award of contract was delayed ten days while a waiver of objection to the construction was obtained from the Secretary of War on the understanding that authority of Congress would be obtained during its present session. This matter has been attended to by Senator Hale.

Upon receipt of this information award of the contract for substructure was made to Powers & Brewer and in three days their outfit was on the ground and construction operations had begun. They proved to be first-class contractors and on the night of Thursday, November twenty-fourth, they completed the contract for the masonry having in the meantime done about eight thousand dollars worth of work on foundations for the piers, which had not been planned on when the contract was let but which it was found necessary to do as the work proceeded.

On account of the ten days delay in the awarding of contract some difficulty was experienced in closing the contract for the super-structure.

The Penn Bridge Company claimed that they had made an error in figuring their bid and asked the bridge commission to allow them some two or three thousand dollars extra to compensate for their error. They also claimed that their proposal and plan submitted were in accordance with our specifications, but on careful examination we found them to be not in compliance with our interpretation of specification in some particulars.

The matter was finally adjusted by agreement of all parties that the contract should be written for the amount of the Penn Bridge Company's proposal and that the bridge should be constructed according to our specifications and a revised plan which should meet these specifications and that the whole matter should then be submitted to a qualified bridge engineer, acceptable to all parties to the contract who shall say how much additional material, if any, we have a right to exact from the said Penn Bridge Company, that they should furnish; and as in the meantime the bridge is to be built according to our interpretation, shall determine for how much extra material, if any, the Bridge Company shall be compensated. This referee will also decide the price per pound that we shall pay for such material, if any shall be found to be required by us. The expense of this refcrence shall be borne equally by the Penn Bridge Company and the Bridge Commission.

Accordingly, a contract with above stipulations attached was entered into with the Penn Bridge Company under date of September twenty-ninth and under the terms of the contract the State of Maine and the Dominion of Canada may be called upon to pay two thousand or three thousand dollars over and above the price submitted in the Bridge Company's proposal.

Owing to the uncertainty which always attaches to foundation work no contract was let for the approach fills to this bridge when the other work was contracted for. As the work progressed and it became apparent that the expense of building the piers and abutments would be considerably in excess of the first estimate we saw that our appropriation would be insufficient to provide for making the approach fills. Local parties interested in the construction of the bridge were called together at Van Buren and the matter was laid before them and about a dozen of the leading business men of Van Buren. Maine, and St. Leonards, New Brunswick, offered to raise the money necessary to build the approach fills and then ask each government to reimburse them for half their outlay. The approach fills were accordingly made under this arrangement, the Bridge Commission allowing their resident engineer to lay out the work and supervise it and keep account of the expense in connection with this work.

We find that there has been expended to date on account of these approach fills five thousand eight hundred seventeen dollars and eighty-seven cents (\$5,817.87) and it is estimated that the cost of completing the work, which was shut down on account of freezing weather, will be eight hundred dollars.

Under date of January seventh our chief engineer, Mr. E. E. Greenwood, gives us the following statement of expenditures to

date and an estimate of the expenditures required to complete the structure, including approaches:

| Advertising bills certified | \$229 60 | |
|-----------------------------------|-----------|-------------|
| Masonry bills certified | 31,150 13 | |
| Approaches bills certified | 5,817 87 | |
| Approaches estimated to complete | 800 00 | |
| Engineering bills certified | 2,460 54 | |
| Engineering estimated to complete | 1,300 00 | |
| Superstructure contract | 40,991 00 | |
| Superstructure contingent bill | 2,000 00 | |
| | | \$84,749 14 |
| Appropriations | | 75,000 00 |
| | | |

Based on these figures it is seen that there will be a deficiency practically of ten thousand dollars above the original appropriations made by the two governments. The Dominion Government has already made appropriation to take care of their part of the additional expense and the State of Maine in addition to reviving the appropriation for this work, which lapsed on the first day of January, should make an appropriation of five thousand dollars more.