

Estimate of cost for new Pivot-Draw 50. feet wide

156. Piles center foundation and abutment ends @ 24. [¢] ea.		3,744 ⁰⁰
15. Old Piles spliced	7 1/2" "	112 ⁵⁰
11200. feet Oak, timber framing &c.	75. [¢] per. M.	840 ⁰⁰
5194. " " Plank	42" " "	218 ⁷⁵
2000. " " Pine of bulkhead	48" " "	96 ⁰⁰
2640. lbs. Iron - Strap bands and pile bolts	.12 [¢] per. lb.	316 ⁸⁰
1000. purches Stone ballast	2. [¢] per. cu. yd.	2,000 ⁰⁰
Framing & Covering turntable & coking, & work on abutment ends & strap bands		628 ⁰⁰
		<u>\$ 7,955.45</u>
176904 lbs Iron in Bridge & Turntable	@ 10 [¢] per. lb.	17,690.40
Lumber		4169 ⁸⁰
Castings Iron & Lumber, & painting bridge		750 ⁰⁰
Sitting up work		1800 ⁰⁰
		<u>\$ 24,410²⁰</u>
Total cost per estimate		<u>\$ 32,365.65</u>

Or _____

For foundations as per estimate		7,955.45
Chicago prices about 85. [¢] per lineal ft. 132. feet long		11,220 ⁰⁰
" " for turntable about		4,000 ⁰⁰
Total cost of		<u>\$ 23,175.45</u>
Drawing Piles and clearing Channel.	85 18 680 22 <u>1830</u>	1030 24,205.45

Estimate, Cost 50. fr Pivot

Bill of materials + Estimate of cost for a slide Draw. West Boston Bridge.

18 Stringer timbers two pieces each 6" x 14"	17208. fr.
2 Thickness 3" covering plank	24480. "
16 Stringer timbers, channel + pier	6824. "
1 thickness 3" covering " " "	7950. "
Pile Capping	7776. "
Slupers on pier	9816. "
outside Capping on piles	3408. "
Planking pier and under draw	19440. "
Bridge railing sill, channel closed + pier	1272. "
Frames for journals of wheels	3984. "
Bridging over channel + pier	3600. "
Bridge stringers " "	8064. "
Flooring roadway " "	9600. "
Sheathing pier	4500. " 127.922 @ 48. #
	6140.26
15447. lbs of iron in bearing and guide wheels,	
Draw gear, tracks, truss rods + bolts, wheel boxes	
plates on end of draw @ 12¢ per lb,	1853.64
121 oak piles driven @ 24¢ each	2904.00
171 " " spliced " 7¢ " "	1197.00
484 feet bridge railing " 2¢ per foot	968.00
carried forward	13062.90

Brought forward		13062.90
Wharf guard 137 ft in length		309.00
255 yards filling roadway & sidewalk	1.5	382.50
311 " paving	3.5	1088.50
106. feet edge stone	.90 [¢]	95.40
5724 bricks and laying		135.21
110 casks nails	5.0 [¢]	550.00
Labor, framing pier & covering not included abv		2500.00
Contingencies		1000.00
		<u>\$19123.51</u>

Bill of Materials and
Est. for Slide Draw Bridge

Report of a Committee,

City of Cambridge

In Common Council March 10th 1868,

The Joint Standing Committee on Roads and Bridges, to whom was referred the order of January 8th "to take into consideration the improvement of the draw on West Boston Bridge and report" have attended to that duty, and would respectfully submit the following report.

Your committee have given the subject a careful and protracted investigation. We find the foundations, and general structure of the draw, to need but few repairs to put them in good condition.

Two particulars seem to cover all that is required in the draw, to wit:
1st To have sufficient width of roadway over the draw to accommodate the public travel.
2^d To have the draw so improved so as to make it practicable to open and shut it, in a short space of time with the ordinary appliances.

With regard to the first point your committee would recommend that the draw remain as at present the full width of the bridge.

As to the second point a former committee recommended the building of a new draw, at an expense of, not exceeding \$12,000. But we find that that estimate was much too low, besides being made for a draw much narrower than the present one, and as your committee believe altogether inadequate to accommodate the public, The cost of building a new draw of the full width of the present one would be very large, and your committee would not advise it at present.

The principal difficulty has been ^{we} think in the adjustment of the bearings of the draw, and the imperfections of the wheel track. Therefore, your committee would recommend, that the present draw be repaired and improved in the following particulars.

- 1st Strengthen the foundation under the centre, by driving additional piles, and make a new centre pivot.
- 2^d Put under a set of coned wheels with new corresponding wheel track — using the same wooden beds, wheel bands and radial rods.
- 3^d Add the necessary length required, and make the draw to revolve entirely around without additional piling at the present pier heads.
- 4th Toss the draw overhead in such a manner as to throw at least two thirds of the weight upon the centre pivot.

Your committee believe, that the above will involve an expenditure of from six to eight thousand dollars.

Herewith we submit plans showing more in detail, what we hereby recommend.

And for the purpose of carrying out the plan proposed, your committee unanimously recommend the passage of the accompanying order

For the committee

Alvaro Blodgett

Repair

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Low on W. Boston Bridge

March 10. 1967