
DRAINAGE BLANK.

IN THE MATTER OF THE PETITION OF

N. O. Pumbly

AND OTHERS.

ENGINEER'S REPORT

Ditch No. *46*

Filed *4/19* 1907

Arthur H. ...

County Auditor.

Approved and adopted

190

County Auditor.

In the Matter of the Petition of _____ N. O. Rumbly, _____ and others
 for a _____ Public Ditch, _____ in the County of _____ Anoka, _____
 State of Minnesota.

TO THE BOARD OF COUNTY COMMISSIONERS OF _____ Anoka, _____ COUNTY, STATE OF MINNESOTA:

I, the undersigned civil engineer appointed by your order dated the _____ day
 of _____ 190____, to survey the route proposed in the petition of _____
 _____ N. O. Rumbly, _____ and others, for a public
 _____ Ditch, _____, respectfully report that, within the time specified in your said order,
 I did make a complete survey of the line of said proposed _____ Ditch, _____ from its source
 to its outlet, and of the branches thereof; and did cause stakes to be set along said line, and along the
 branches thereof, numbered progressively down stream at each one hundred feet.

That in making said survey I did locate the source, outlet, and line of said _____ Ditch, _____
 as near the points of source, outlet, and line described in said petition therefor as practicable,
 and did consider and specify such branches of said _____ Ditch, _____ as in my opinion are
 necessary to give the land owners likely to be assessed for its construction the full benefit thereof; and
 wherever the line of said _____ Ditch or its branches along established highways I did locate it at
 a sufficient distance from the center of said highways to admit of good roads along the central line
 thereof, and in such manner as to provide sufficient and suitable culverts and openings to drain
 away the surface water therefrom, and so as not to obstruct the flow of surface water therefrom in time
 of high water; and did, so far as practicable, locate said _____ Ditch or branches _____ on division lines
 between lands owned by different persons, and did avoid, as far as practicable without sacrificing the
 general utility thereof, laying the line of said _____ Ditch or its branches diagonally across lands
 owned by persons on or across which the said _____ Ditch or branches _____ must pass.

I have caused a map of said survey to be made, showing the line and location of said
 _____ Ditch, _____ and of the branches thereof, the highways along which any part thereof
 runs, the stakes placed along the line thereof and along said branches thereof and the number of
 each stake, the separate tracts of land over or across which any part thereof and its branches pass,
 a description of each tract, the number of acres in each tract, the boundaries of each tract, and the
 name of the owner of each tract. And the course that a ditch would pass through
 the so-called Columbus Lake if there was a sufficient flow in Rice Creek
 _____ to allow the water to pass from the lake.
 _____ which said map is hereto attached and made a part hereof, marked "Exhibit 1."

I did further cause to be made in tabular form a statement, showing the number of cubic yards to
 be excavated between each of the one hundred feet stakes along the line of said _____ Ditch, _____
 and the branches thereof, the cost of excavating the same per cubic yard, the estimated cost of the
 removal of obstructions between each of said one hundred feet stakes, the estimated cost of all wood
 and masonry work, fences or bridges necessary between each of said one hundred feet stakes, the
 estimated cost of all underground work with tile or other material between each of the one hundred
 feet stakes, the total estimated number of cubic yards of earth to be excavated from said _____

_____ Ditch _____ and the branches thereof, the estimated preliminary expense and expense of
 inspection of the same until its completion, and the total estimated cost of said work complete to its
 completion; which said tabular statement is hereto attached and made a part hereof, marked
 "Exhibit 2."

I did further cause to be specified and set forth in tabular form the depth of cut, the width at the bottom, the width at the top, between each one hundred feet stakes of said Ditch and branches the obstructions to be removed, the wood or masonry work, fences, bridges, or other structures, necessary to be constructed between each of said one hundred feet stakes, the underground work, with size and character of tile and other materials necessary to be constructed between each of said one hundred feet stakes, the manner in which the several kinds of work is to be done, and the time within which the work on each of said sections between said one hundred feet stakes is to be done; which said tabular statement is hereto attached and made a part hereof, marked "Exhibit 3."

I did further cause to be specified and set forth in tabular form a statement, showing the time occupied by me in making said survey and my compensation therefor; the names of the assistants and laborers employed in making said survey, the time each was employed, the amount per day of their compensation, and the total amount each is to be paid; and the other expenses of every kind and nature incurred by me in making said survey, and the amounts thereof; which said tabular statement is hereto attached and made a part hereof, marked "Exhibit 4."

Where said Ditch or branches runs along or across, or drains, any public or corporate road or railroad, I did specify that the earth shall be placed upon the road bed of said roads within a reasonable distance from the crossing of the roads,

It is the intention to have the town board of supervisors to build the bridges wherever the ditch or any of its branches crosses a traveled road and allow the said Town whatever damages they will be placed at in building said bridges over and above the benefits to the roads of the said town.

I did cause to be prepared, with the assistance of the County Attorney of said Anoka,

County, a form of contract under which the work of the construction of said Ditch and branches is to be done, with complete specifications of the manner in which the work of said construction is to be done attached thereto, which said form of contract and said specifications is hereto attached and made a part hereof, marked "Exhibit 5."

The petition for this ditch called for the ditch to be built through the Columbus Lake so-called into Rice Creek. A survey was made to the said Rice creek and it demonstrated that the water in Rice Creek was as high as the water in the Columbus Lake and then the the outlet of the lake was sufficiently large at present to allow the water from the lake to flow into the Rice Creek if there was a chance for it to flow through the Creek The Bottom of the outlet was low enough to allow the water to pass. It was decided therefore to simply run the water into the Lake and there and the ditch.

In the crossing on the old St. Paul and Duluth road it is designed to place two foot sewer pipe for One Hundred feet to allow the water from this ditch to pass under the road. This was done for the reason that the road bed is quite high and a bridge would be very costly.

J. E. Hill

Civil Engineer.

Dated this --- 19th. --- day of --- April, --- A. D. 1907.

State of Minnesota,

County of _____

J. E. Hill

ss.

_____, being duly sworn, on oath says that he is the civil engineer who made the foregoing report and made the survey therein referred to; that he has read the foregoing report and the exhibits thereto attached and knows the contents thereof, and that the same are true and correct of his own knowledge.

J. E. Hill

Subscribed and sworn to before me this

19th day of

April

A. D. 1907.

Arthur J. Sarnett

Recorder of Deeds