

ENGINEER'S REPORT
ANOKA CO. DITCH 57

In the matter of County ditch proceedings now pending in Anoka Co. and known as County Ditch No. 57 to be restored to its original width and grade: according to Chapter 82, Minnesota Laws 1945.

To the Board of Commissioners of Anoka County:

I, R.G. Streetly, the undersigned Civil Engr. appointed by your order to act as engineer in the above matter: hereby certify that I have made such surveys and investigations as are required and hereby submit my report.

It has been difficult to ascertain the original grade of this ditch as all but one of the original Bench Marks have been destroyed or obliterated. The one Bench Mark that I had to presume correct was on the so called Nelson Bridge. No specific point on this bridge was designated so I assumed the top of the concrete abutment as being correct. This elevation corresponds within 1.5 feet of the present ditch bottom at this point, and I believe that is about the amount that the ditch has filled in since its original construction.

No plat of the course and location of this ditch or its branches are on file with the Co. Auditor, so a new one had to be made by me. This required quite an extensive survey. Profiles, showing original ground lines and the finished grades of the main ditch and its branches, and also the station of the entrances of branch ditches were on file at the Co. Auditor's Office.

I find that the principal stoppage of flow is caused by trees and brush growing in the ditch bed. These trees range in size from two to twelve inches in diameter. From the beginning of the ditch to the end, a distance of 8.4 miles, there are 1,980 trees and bunches of brush growing in or on the ditch slopes. These greatly hinder the flow as they collect all floating debris causing numerous small dams. There is also a concrete dam built by the W.P.A. at Station 366 / 25. The Elevation of this weir is 97.5. Our ditch grade at this point is 95.6 which is 1.9 feet below this concrete weir. This should be removed. As this ditch has a fall of 23.4 feet in the 8.4 miles, it is my opinion that if all obstacles were removed from the stream bed and slopes, and the dredging completed as shown on the plans, this ditch would be in perfect condition. Quantities have been computed and a contract may be let.

Branch No. 1, according to the original plans, enters the Main Ditch at Station 47/55 and is 850 feet long. This branch continues beyond the 850 feet but was evidently dug at a later date. This branch should be cleaned.

Branch No. 2, according to the original plans, enters at Sta 0/00 of the Main Ditch, which point is Sta 66/25 of said Branch No. 2 and runs to Sta 0/00 which point is the center of Central Avenue. Upon resurvey I found that this branch does not go to or near Central Ave. We chained back from the starting point 6625 feet and found no end to the branch at that point and it was not near Central Ave. I believe there was some error in the original survey. No levels were taken on this branch and I do not believe it is a part of the original ditch system.

The attached plat shows the location of the branch entering at Sta 0/00 and is labeled Branch F.

Branch No. 3, according to the original plans, enters the Main Ditch at Sta 16/00 and was to be 5,050 feet long. There is no branch entering at or near this point on the main ditch.

Branch No. 4, according to the original plans, enters the Main Ditch at Sta 318/00. This branch is 1950 feet long and is in good condition. It has recently been cleaned out from Sta 11/00 to Sta 19/50. Levels were taken on this branch from Sta 0/00 to Sta 11/40 and the yardage computed. It is my opinion that no cleaning is necessary from Sta 11/40 to Sta 19/50. Waste banks should be leveled by the contractor on this branch.

Branch No. 5 on the original plans enters the Main Ditch at Sta 339/50. There is no branch entering at this station but one enters at Sta 333/50 and I assumed that this is the one mentioned in the original plans. There are two lateral ditches specified on this branch. One is at Sta 2/21 and one at Sta 14/45. There is no evidence of either of these laterals being constructed. Laterals enter at Sta 9/50 and Sta 10/10. Levels were taken on this branch and quantities computed. This branch is in poor condition and is badly in need of repair. If the Commissioners decide this is a part of the original plan it can be made a part of the contract.

The attached plat shows the location of the main ditch and all branches and also the names of property owners benefited by this drainage system. Branch E, I was told, is a County Ditch. I can find

no record of a County Ditch at this location. It is quite an extensive system in itself. However, County Ditch No. 57 provides an outlet and so this branch is benefited. Branches A,B,C,D,and E are in good repair. Branch F requires some cleaning.

I believe the reconstruction of this County Ditch will be of benefit and conducive to public health, convenience and general welfare and that the benefits will exceed the cost of reconstruction. I recommend that this ditch be reconstructed according to the attached plan.

R. Shively Engr.