

# 2008 Annual Report

## *Mower County*

### *Drainage Systems*

**CD #1 - FEMA Repair**



**CD #8 - Wind Tower Crossing**



**CD #26 - Tile Outlet Repair**



**CD #77 - Outlet Pipe Repair**



## **COUNTY DRAINAGE SYSTEM NO. 1**

- LOCATION:** Clayton Township, Sections 12, 13, 14 & 23 (tile lines)  
Bennington Township, Sections 7, 8, 9 14, 15 & 16 (open ditch)
- DESCRIPTION:** The drainage area is 18.0 square miles with 5.3 miles of open ditch. The watershed acres total 11,514.
- BRIEF HISTORY:** This drainage system was constructed in 1920. A redetermination of benefits was completed in the year 2000 and since then a major cleanout was completed in 2006. The total net benefits for the system equals to \$6,725,560.00 and the total damages (1 rod grass strip) equals to \$31,760.00.
- PAST/FUTURE REPAIRS:** The one rod grass strip is now established along side the open ditch. There were four different tile repairs this past year. We will continue a spraying program every year for the first few years to make sure we have the trees and brush under control. A heavy rain in the month of June created some heavy damage on this system. The repair bill for repairing this was \$25,850.00 of which FEMA paid 90%.

## **COUNTY DRAINAGE SYSTEM NO. 4**

**LOCATION:** Austin Township, Sections 8, 9, 16, 21, 28 & 29

**DESCRIPTION:** The drainage area is 2.5 square miles with no open ditch. This system is strictly all tile. The watershed acres total 1,505.

**BRIEF HISTORY:** This drainage system was installed in 1918 and has served its purpose well over the years. Some of the tile is now in poor condition and is not large enough to handle the drainage. A redetermination of benefits was done in 2005 with the public hearing held in February 2006. As a part of this redetermination, there was a partial abandonment which encompasses properties within the city limits. The total net benefits for this system is \$458,946.00 with no damages being assessed.

### **PAST/FUTURE REPAIRS**

Past work consisted of tile blowout repairs. A section of the main tile close to the outlet does not have much cover on it and will need to be dealt with. Bolton & Menk Engineers has surveyed the replacement of the main tile and we will be getting bids to do this work this coming year. Also, we should start looking into replacing some of the tile that is in poor and decaying condition.

## **JOINT COUNTY DITCH NO. 5**

- LOCATION:** Lansing Township, Sections 7, 8, 9, 15, 16, 17 (open ditch)  
Lansing Township, Sections 5, 6, 7 & 8 (tile lines)  
Freeborn County, Moscow Township, Sections 11,12, & 13  
and Newry Township, Section 1 (tile lines)
- DESCRIPTION:** The drainage area is 10.3 square miles with 2.6 miles of open ditch and 25.2 miles of tile lines. The watershed acres total 6,615 and there is 11.05 acres of grass strip on both sides of the open ditch.
- BRIEF HISTORY:** J.D. #5 was originated in 1922 and has remained in fairly good condition with regular maintenance. A redetermination was completed in 1999. The net benefits amount to \$1,308,642.00 and the one rod grass strip damages equals to \$15,675.00.
- PAST/FUTURE REPAIRS:** The open ditch has been cleaned out in 1956, the mid 1980's and again in 2000. There has been numerous tile repairs over the years and there was approximately 1200 feet of a main tile that we moved into a hillside to get adequate cover on it. In 2008 there was some minor work done as normal maintenance and the entire open ditch was sprayed. Heavy rain in the month of June created some extensive damage to the open ditch. The total repair bill amounted to \$13,565.00 which FEMA paid for 90%.

## COUNTY DRAINAGE SYSTEM NO. 6

- LOCATION:** Adams Township, Section 25, Lodi Township, Sections 30 & 31 (open ditch)  
Adams Township, Sections 24 & 25, Lodi Township, Sections 19 & 30 (tile lines)
- DESCRIPTION:** County Ditch #6 consists of 2.1 miles of open ditch and 8.6 miles of tile lines. The watershed equals to 2,240 acres which relates to 3.5 square miles. The outlet for the open ditch is the Wapsipinicon River.
- BRIEF HISTORY:** C.D. #6 was built in 1922. There was a major cleanout done in 1993 and a redetermination of benefits was completed in 1999 at which time the one rod grass strip was established. With minimal maintenance each year the open ditch is in very good condition.
- PAST/FUTURE REPAIRS:** There was a major cleanout of the open ditch done in 1993 and there has been several tile repairs. Due to severe flooding in the late 1990's, there were areas of the banks on the open ditch that were repaired, some using side-in-let pipes. There are sections of tile that will need to be replaced or repaired in the near future because of deterioration. In 2009, the drainage inspector will hold a landowner's meeting to discuss the necessity of replacing some of these tiles. The open ditch was again sprayed this past year and a main tile crossing a township road was repaired.

## **COUNTY DRAINAGE SYSTEM NO. 7**

**LOCATION:** Dexter Township, Sections 10, 13, 14 and 15 (all tile lines – no open ditch).

**DESCRIPTION:** This system is a closed tile system with no open ditch. The outlet is a cement 26 inch main outletting into a creek. The watershed covers 1100.8 acres which includes the south part of the town of Dexter. There are 12,008 feet (2.3 miles) of main tile and 24,202 feet (4.6 miles) of branch tile.

**BRIEF HISTORY:** C. D. NO. 7 was constructed in 1920 and as of today is in fair condition. It was constructed as a closed tile system.

**PAST/FUTURE REPAIRS:**  
There has been several iron grate inlets replaced with stand up pipes. There has been two tile repair jobs in the past few years. We don't anticipate any major work to be done on this system soon

## **COUNTY DRAINAGE SYSTEM NO. 8**

- LOCATION:** Clayton Township, Sections 8, 9, 16 and 17 (open ditch –no tile lines)
- DESCRIPTION:** The drainage area is approximately 6.4 square miles with 4200 acres of watershed. This system is an open ditch system with no county tile involved. There are 3.2 miles of open ditch.
- BRIEF HISTORY:** C.D. #8 was constructed in 1958 as an open ditch system. It flows to the north and outlets into the Deer Creek system. The system is in relatively good condition, but is more prone to flood damage than other systems.
- PAST/FUTURE REPAIRS:**  
Past repairs consisted of removal of beaver dam and repair of the open ditch banks due to flood damage. We have installed flood water control pipes in strategic locations to lessen bank damage and we now have a tree/shrub spraying program to keep beavers out of the ditch. We also have done minor cleanouts in areas that silted in due to heavy runoff from the surrounding fields. There are now CRP filter strips along side most of the open ditch to prevent silting in the future.

## **COUNTY DRAINAGE SYSTEM NO. 17**

**LOCATION:** Austin Township, Sections 30 & 31, Mower County and Oakland Township, Sections 25 & 36, Freeborn County.

**DESCRIPTION:** This system is administered through Freeborn County – very little information is available. There is no open ditch, just all tile. Freeborn County did a redetermination in 2008.

## **COUNTY DRAINAGE SYSTEM NO. 26**

**LOCATION:** Lansing Township, Sections 19, 20, 21 and 28, Mower County (open ditch and minimal tile lines). Moscow Township, Section 24 Freeborn County (tile lines only)

**DESCRIPTION:** C.D. #26 has 4265 acres of watershed with 4.7 miles of open ditch. There are 6.0 square miles of drainage in Mower County and 0.6 square miles in Freeborn County. This system is also known as Murphy's Creek. The outlet of the open ditch is a natural creek which eventually ends at the Cedar River. There is one main tile that is 1800 feet long outletting at the upper end of the open ditch.

**BRIEF HISTORY:** The system was established on July 29, 1949 and construction completed in 1951. The main tile consists of 14 inch and 12 inch tile. There were numerous other tile branches and laterals included in the original design but not constructed due to the high cost of construction. A redetermination was completed in 2003 and the benefited amount is now \$983,317.00. The damages for the one rod grass strip have been paid.

**PAST/FUTURE REPAIRS:**

In 1953 a repair petition was filed and the open ditch was cleaned and two structures repaired. There was also a major cleanout done in the mid 1980's and a repair to the main tile in 1999 due to heavy flooding that year. The cleanout of the open ditch was started in 2007 and finished in January of 2008. In June, 2008, there were heavy rains that caused extensive damage to a few areas of the open ditch. FEMA paid for 90% of the repair bill which amounted to \$12,152.00. In 2009, the open ditch will be sprayed to control the brush and trees.

## **COUNTY DRAINAGE SYSTEM NO. 77**

**LOCATION:** Lyle Township, Sections 7, 8 and 17.

**DESCRIPTION:** Also referred to as the McGee group. There are 1.5 miles of open ditch with 10,884 feet (2.1 miles) of main tile and 25,360 feet (4.8 miles) of branches/laterals. The tile ranges from size 6 inch to 24 inch. There were also 12 breather pipes installed on the tile system. The outlet for the open ditch is a natural creek which leads to the Cedar River. The drainage area covers 3.8 square miles which relates to 2226 acres.

**BRIEF HISTORY:** C.D. #77 was constructed in 1975.

**PAST/FUTURE REPAIRS:**

A major cleanout of the open ditch was done in 1996. There has been minor tile repairs over the years. A maintenance program of spraying for trees/shrubs helps keep this system in very good condition.

## **COUNTY DRAINAGE SYSTEM NO. 79**

**LOCATION:** Lyle Township, Sections 23, 24, 25 and 26.

**DESCRIPTION:** Also referred to as the Truckenmiller/Johnson Group, C.D. No. 79 has 4.8 square miles of drainage. There are 3072 acres in the watershed and the outlet is a natural creek which leads to the Cedar River. The open ditch covers 1.7 miles and there are 12 main tile lines. The tile lines range from a 6 inch to 24 inch and there is approximately 9.3 miles of tile.

**BRIEF HISTORY:** This system was constructed in 1978 for a total cost of \$214,606.00. The open channel cost \$54,782.00 and the tile cost \$159,824.00. There were 7 flood water inlet pipes installed in the bank of the ditch and 17 breather pipes put on tile lines in different places.

**PAST/FUTURE REPAIRS:**

C.D. #79 is in excellent condition. There has been repairs in the recent past due to above average storm events. These repairs included tile repair, replacing flood water inlets and a cleanout of part of the open ditch. There is a maintenance plan in place which includes spraying for trees/shrubs. This past year we had to repair tile outlets and remove beaver dams on the outlet end of the ditch. In 2009, we scheduled a minor cleanout of the open ditch because of sediment dams building up.