

BUFFALO-RED RIVER WATERSHED DISTRICT

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BUFFALO-RED RIVER WATERSHED DISTRICT Minutes for Landowner Informational Meeting Project No. 27, Clay County Ditch No. 55

June 4, 2019

The Board of Managers, Buffalo-Red River Watershed District (BRRWD), held a landowner informational meeting regarding the possible repair of Project No. 27, Clay County Ditch (C.D.) No. 55 on Tuesday, June 4, 2019, at 7:00 PM in the BRRWD office, 1303 4th AVE NE, Barnesville, MN. BRRWD Managers present were Jay A. Leitch, John E. Hanson, Gerald L. Van Amburg, Catherine L. Affield, and Peter V. Fjestad. BRRWD Staff attending included Kathleen K. Fenger, Assistant Administrator, Erik S. Jones, Engineer, and Wade S. Opsahl, Technician, Houston Engineering, Inc. (HEI). Others attending included: Bill Austin, Freemont Pender, Ashley Tucker, Darrin Tucker, Ronald Johnk, Lavonne Heng, Tanya Haugen, Kevin Martin, Jim Baker, and Gerald Hatlestad.

BRRWD President Jay A. Leitch called the meeting to order at 7:01 PM. He introduced the BRRWD Board and Staff. He announced that the proceedings were being recorded to aid in the preparation of the minutes. An attendance sheet was circulated.

Erik S. Jones, BRRWD Engineer, gave a brief history of the C.D. No. 55 system. The drainage system was improved 23 years ago in 1996. In the summer of 2017, the Board authorized HEI to conduct a repair survey of the main ditch. They found there are places along the ditch that have close to 2' of sediment build-up. Landowners also reported some problems during this year's spring runoff with breakouts on the berm along the lateral. A cleanout in that area could be used to raise the berm where needed.

The group reviewed a map of the ditch system benefit area as determined for the 1996 improvement project. Jones explained that the ditch system consists of two ditches. The main ditch begins just west of Downer on the east side of Section 20, Elkton Township, Clay County, heading west along the south side of County Road (C.R.) No. 10, crossing under Interstate-94 (I-94) and through C.R. No. 21, then turns north along C.R. No. 10, eventually draining into Stony Creek in Section 22, Elmwood Township. The lateral to the main ditch begins at the southeast corner of Section 24, Elmwood Township, crossing the section to the northeast and connecting to the main on the north side of Section 24 near the north-south quarter line. The ditch has a 10' wide bottom with 4H:1V slopes and grades varying from 0.04% to 0.13%.

The 2017 survey showed that the current ditch cross section and ditch bottom width varies due to sediment buildup at the toe of the side slopes. The sediment buildup along the toe has narrowed the channel, reducing capacity. The sections where the most repair work would be needed are 23 and 24, Elmwood Township, and 19, Elkton Township. The stretch of ditch west of I-94 should also be repaired, starting at Stony Creek, and heading east to 130th ST S. The opinion of probable cost for the repairs is \$45,000 to \$65,000. The system currently has an account balance of \$21,028.14.

Opsahl discussed spring runoff problems on C.D. No. 55 and what has been done in the past to deal with blockages and breakouts along the ditch system. He noted that there are a number of culverts along the ditch that have to open in the spring before the ditch performs correctly. He explained that the repair

would consist primarily of excavator work to return the bottom to the original size and grade. The spoil could be used to fill in gaps along the berm where water historically breaks out.

Ronald Johnk commented that the larger upstream culverts along C.R. No. 10 created more drainage problems for his property in the NW¹/₄, Section 23, Elmwood Township. In addition, during spring runoff, Stony Creek breaks out from the south along the east ditch of C.R. No. 15 and water escapes C.D. No. 55 from the east, all causing worse flooding on his property. He would like to have a gate installed on the east-west quarterline culvert along C.R. No. 15 on the west side of Section 23 to stop the water in the road ditch from backing up onto his property.

Tanya Haugen asked for clarification about the proposed work. Jones reiterated that the proposed repair would be to clean the ditch bottom to the original grade line and use the spoil to fill in gaps in the ditch berm to help prevent future breakouts. Haugen asked if any culvert replacements have been proposed for the repair project, and if the metal culverts could be replaced with concrete. Opsahl noted that even though the culverts might show some wear from excavators, etc., they would only be replaced if they are crushed or deteriorated and not capable of conveying water. He added that it would be very expensive to replace culverts for cosmetic concerns only, and concrete culverts would be the most expensive option. Haugen asked if the existing culverts are still adequate. Jones explained that the ditch culvert sizing was redesigned for the 1996 improvement. Haugen noted that since the improvement, more water from the east has been added. Jones explained that the water coming from the east side of I-94 was always part of the 1996 ditch improvement design. Opsahl added that the last part of the project was for the Minnesota Department of Transportation (MNDOT) to lower the I-94 culverts, and it took several years for MNDOT to complete that work. When those culverts were finally lowered, the approach culverts on the east end of C.D. No. 55 were lowered and the ditch was cleaned, according to the improvement plans. Haugen also asked if the ditch system was responsible for the costs to fix the overtopping problems on her driveway crossing. Opsahl commented that we had raised the ditch berm and the driveway a few years ago as a ditch system expense. Haugen said raising the berm eliminated water coming into their farmyard, but this spring, water overtopped their driveway again. Opsahl will take a look to see if more work needs to be done.

Ronald Johnk asked about how the assessments are determined. Jones explained the Viewing process to determine who benefits from the project. Johnk thought the Viewers' Report was wrong. He thought that the property on the east end of the ditch should pay as much in benefits as he is (\$100/acre). His concern is that water from the east breaks out of the ditch and floods his property located near the ditch outlet. The only way to change the way the benefits are allocated is for the ditch system to go through a redetermination of benefits.

Jim Baker also questioned the project benefits, commenting that his property doesn't benefit from the ditch. Darrin Tucker agreed with Baker, noting that the project isn't working properly because water overtops the ditch berm along his property. He said that during the summer, water stands in the ditch most of the time, and during the spring runoff, water overtops the berm on his property from the east. He described how water from the east impacts all the downstream properties, and he thought that the upstream properties should be at a higher benefit rate. Opsahl noted that until the ditches open in the spring, it's difficult to control where the water goes. When a farmstead or house is threatened by breakouts, the BRRWD will try to open the ditch to divert flows away from the structures. He explained that one of the features of the proposed repair is to raise the berm along C.D. No. 55 to a more even height to eliminate some of the breakouts Tucker was referencing on Fremont Pender's property.

Baker commented on the velocity of the flows coming to Stony Creek in the spring that washes out the road and the issue of the limited channel capacity. He suggested that if people's houses are in jeopardy of flooding

in the spring, they should raise them above the flood elevation. Opsahl pointed out that a lot of the houses along C.D. No. 55 were built prior to the current wet cycle. Baker pointed out that the C.D. No. 55 outlet, Stony Creek, is full of sediment and can't handle more upstream water.

Tanya Haugen asked how the Board planned to handle the landowners' share of the project costs. Jones explained that the Board could decide to assess the ditch system landowners for the project on a per acre basis over a number of years through their annual ditch system assessments.

Baker briefly discussed the drainage patterns in Sections 19 and 30, Elkton Township, pointing out that the water flowing onto his property should be routed to the lateral in the SE $\frac{1}{4}$ of Section 24, Elmwood Township, where it's assessed to drain.

Haugen asked if there has been any maintenance work conducted since the improvement in the 1990s. Opsahl said that over the past several years, the BRRWD dealt with erosion issues at the ditch outlet and repaired and installed culverts/flapgates along the ditch and raised Haugen's driveway/berm. Haugen observed that it might be more cost effective to do more frequent smaller scale cleanouts for the ditch system than waiting until larger, more expensive repairs are necessary. Baker commented that during the spring runoff, the current volume of ditch system sediment isn't the major factor effecting farmstead/overland flooding. Opsahl agreed, noting that spring flooding is unpredictable due to snow melt in the ditch and culvert conditions.

Baker asked about the ditch grade coming from the east. Jones explained that the grade of the upper part of C.D. No. 55 from I-94 and upstream is a 0.07 to 0.08. Downstream on the west side of C.R. Nos. 21 and 10, the grade is 0.11, or slightly steeper than the upstream channel. Through Section 24, the grade is 0.07, and in Section 23, the grade is 0.04. In the NW $\frac{1}{4}$ of Section 23 along Johnk's property the ditch grade steepens again at 0.13, and then as it flows towards the South Branch of the Buffalo River, the ditch grade falls. The group had an extended discussion regarding land elevations, ditch grades, and sediment sources along the ditch. Jones noted in light of the fact there is only about 18" of sediment in the ditch channel, it shows that the ditch system is working pretty well. He added that the side inlets can significantly reduce the amount of silt washing into the ditch. Opsahl added that wind erosion can also be a factor in ditch siltation.

Bill Austin asked how much sediment will be removed from the ditch. Jones referred to the repair plans. The sediment is the deepest in the NW $\frac{1}{4}$, Section 24, and sedimentation would also be worse in the stretch of channel downstream of where the lateral enters the main.

Ronald Johnk noted that the culvert off the County Road on his quarter in Section 23 is plugged and asked who is responsible to open that pipe. Jones thought that it would be up to the landowner, but Johnk could contact the County about assistance. Johnk asked if a flapgate could be installed on the south end of this culvert to prevent water from the Creek backing up on his property. Jones suggested that Johnk could submit a BRRWD permit application for the flapgate for the Board's review.

Freemont Pender asked if the repair plans called for building up the ditch berm along his property. Opsahl explained that we plan to fill in low spots all along the ditch berm with the excavation spoil, subject to keeping the berm elevation to within 1' of the county road height (where applicable) to keep water from breaking out to the north over the berm. He'd also like to be reimbursed for the gravel he placed on the dike to plug a breakout area. Opsahl told Pender to forward the gravel invoice to the BRRWD office and we'll pay him back. Ashley Tucker noted that Pender lost his well because it was too close to the dike when the ditch was improved, and the pipe wasn't elevated. Haugen's well is also close to the dike. Opsahl thought that this issue should be reviewed.

Ashley Tucker asked if any work is planned for the Lateral. There are dikes on both sides of the ditch until it gets to their farmstead, then the east dike stops, and water breaks out into their pasture and yard. Jones will take a look at the concern.

Opsahl asked the audience about their preferences regarding the term of the assessments. Jones estimated that the highest benefit rate could be about \$15/acre. Pender and Tucker thought that spreading the payments over two years would be best. Austin commented that the landowners always have the option to pay the assessment all at one time to avoid paying interest. Opsahl corrected his statement by explaining that since this project will be financed via annual ditch system assessments and not a bond sale, the one-time payment option wouldn't be available.

Fjestad asked if the landowners had come to a consensus about moving forward with the repair. Darrin Tucker commented that his main concern was to have the low spots in the dike filled in so that the water in the ditch can't breakout and flood his property. Baker noted that he really doesn't need to have the ditch cleaned because the ditch works fine along his property, and he doesn't think he will benefit from the project. He added that those who have farmsteads/houses along the dike where breakouts occur, shouldn't have bought the property in the first place, or should raise their structures, so they don't flood. Kathy Fenger reported that she received phone calls from a couple of landowners who couldn't attend tonight's meeting: Gary Cook, who is opposed to the proposed repair, and Chuck Anderson, who supports the repair. Tucker noted that his family's farmstead predates the man-made ditch system, which is currently causing flooding on his property because the berm wasn't built correctly. He thinks that if the project is necessary to fix the berm, it should be built. Baker thought the repair project wasn't needed, and the BRRWD should just repair the low areas in the dike where breakouts occur. The group briefly discussed the proposed upstream Stony Creek Water Resources Management Project (WRMP) in Sections 3, 4, and 9, Barnesville Township. They also discussed project alternatives that could slow down the water coming into the area from the east, including developing the MNDOT borrow site on the east side of I-94 into a retention site. Baker discussed the need and benefits for the BRRWD to develop more retention sites throughout the District.

Van Amburg asked the audience what they wanted to do regarding the proposed repair. Tucker felt that if the repair is needed to fix the berm to protect farmsteads adjacent to the ditch, then the project should move forward. He added that if it's possible to develop the I-94 borrow site for retention, the plan should be modified to incorporate that feature. Haugen agreed that the project should move forward if that's what it takes to level out the berm to prevent breakouts.

President Leitch observed that Jones should investigate some of the questions the landowners raised and asked him to explain the next steps in the project development. Jones noted that if the Board decides to move forward with the repair, we will need to obtain permission from the landowners to deposit spoil on their property and then solicit construction bids from a few contractors to do the work. Van Amburg added that the Board will keep in mind that landowners wanted their assessments spread out over at least two years.

Leitch encouraged Jones to find the "least cost" solution for the ditch system problems. The Board will make a decision regarding the proposed repair project at their next meeting.

Leitch asked if there were any other questions or comments. There being none, he adjourned the meeting at 8:15 PM.

Respectfully submitted and prepared by

John E. Hanson, BRRWD Secretary