



**JACOBSON-WESTERGARD
& ASSOCIATES, INC.**

105 South 6th Street
Estherville IA 51334
PHONE 712-362-2647 • FAX 712-362-2668
EMAIL jwa@jacobson-westergard.com

www.jacobson-westergard.com

Scott A Brunsvold, PE
Patrick N Boggess, PLS
Collin J Klingbeil, PE
Chris Towell, PLS

Dale D Jacobson, PE (1922—1995)
Kenneth D Westergard, PE, PLS (1930—2020)
Robert V Bendixen, PLS (1947—2022)
Richard A Hopper, PE (Retired)

"Bettering Iowa since 1970"

September 12, 2025

RE: Amendment No. 2 to Engineer's Report
Joint Drainage District No. 61 Branch 399 West Drainage Improvements
Dickinson County, Iowa
JWA PROJECT NO: E24106

Dear Board Members and Landowners:

A public hearing on proposed improvements to Joint Drainage District No. 61 Branch 399 West was held on September 9, 2025. The hearing was continued to September 15, 2025 and we were directed to develop a cost estimate for an open ditch without Branch 399W or 399W-46 tile improvements (will be referred to as Option 5).

Based on Iowa Code, our originally filed report may be amended at any time prior to final approval. We hereby submit this Amendment No. 2 to our originally filed report dated January 2, 2025. We also updated the preliminary classification to include parcel-by-parcel cost estimates for this reduced scope improvement option.

A. Option 5 – Open Ditch Improvements

The Option 3 & 4 improvements, presented in Amendment No. 1, included an approximately 3,100 foot new open ditch along the north side of 230th Street. This was predicted to result in a significant cost savings as compared to tile improvements for the same reach (upwards of nearly \$360,000). With Option 5, we would remove the proposed improvement to the Branch 399W-46 tile, and only extend a tile for Branch 399W across 230th Street.

For Option 5, along with the open ditch we would recommend a 42" diameter tile across 230th Street to provide access to the open ditch to the lands to the south. Additionally, we recommend the short Branch 399W-13 and Branch 399W-25 tile improvements previously proposed remain in the project. These tile improvements would run from the open ditch south across 230th Street, giving the lands south of the road access to the open ditch. Dickinson County Secondary Roads is responsible for the cost of tile improvements within its road rights-of-way (ROW).

We estimate a total project cost of approximately **\$450,000** for this improvement option. That does not include possible attorney fees if the natural gas pipeline issue results in litigation. That is an average of \$319/acre. At 6% interest over 20 years a parcel with an average per acre assessment would pay \$28/acre per year. See the enclosed pre-class dollars maps for parcel specific estimates for Option 5 (for informational purposes only).

B. Evaluating the Improvement Options

Cost Estimate Summary Table

Option	1	2	3	4	5
Description	Full Tile Improvements	Reduced Tile Improvement	Open Ditch & Tile Improvements	Open Ditch & Reduced Tile Improvements	Open Ditch
Estimated Project Cost	\$2.206 million	\$1.541 million	\$1.848 million	\$1.218 million	\$450,000
Avg Cost Per Acre*	\$1,568	\$1,095	\$1,313	\$852	\$319
Avg Cost Per Acre over 20 years at 6% interest	\$137	\$95	\$114	\$76	\$28

*: Actual costs per acre vary by parcel. See preliminary classification report for parcel specific cost estimates.

At the September 9th hearing, the general sentiment from those speaking against the project was that the project cost is too high. We note that of the options previously presented (1-4) the cost varies a great deal, from \$2.206 down to \$1.218 million. We recommended Option 3, with an estimated project cost of \$1.848 million.

As has previously been discussed, the existing tile system is inadequate for current and future drainage needs. If we only improve the lower approximately 3,000 feet of the system (Option 5), the vast majority of the land area involved will continue to rely on district tile that are undersized and over 100 years old. Immediate drainage improvements to lands far off the new open ditch would only be to the extent that the portion of the Branch 399W tile to be improved and replaced with an open ditch had restricted its drainage in the past.

In our opinion, although Option 5 is much less expensive, many of the landowners in the district likely will not realize an immediate improvement in drainage but will still have to pay towards the project (primarily on the basis that a new and better outlet was brought closer to them). In essence, these landowners would be paying to lay the foundation for additional improvements in the future. Until additional improvements are made, the return on investment for these lands would be at or near \$0.

C. Additional Thoughts for Consideration

1. Future Regulatory Environment

Currently there are no rules or regulations restricting a drainage improvement of this nature. However, looking into the future that may not always be the case. Over time, in general regulations tend to become more stringent (not less so). The public view of drainage has degraded significantly over the last 20 years. We have had the Des Moines Water Works lawsuit, and this summer residents of Des Moines had a watering ban related to high nitrate levels in the water source. Just a few weeks ago a petition was filed by nine organizations in

Minnesota asking that the Minnesota Pollution Control Agency initiate a rulemaking process to regulate and require permits for agricultural drainage systems.

Possible permits, restrictions, or requirement to include water quality treatment elements in drainage improvement projects could certainly make a project of this nature more difficult and more costly in the future.

2. Tax Benefits

It is important to note that there are tax benefits to a drainage improvement project of this nature. If the property is owned and farmed by the same individual, much of the investment may be deducted in the year of installation. Landowners who rent out the land have several options as well, including setting up a depreciation schedule, which is tax deductible.

3. Yield Benefits

We note that the previously referenced studies showing 10-15% yield benefits for projects of this nature did not consider yield benefits due to reduced ponding. We certainly expect some lands to have well over 15% yield increase over time. For Option 3 dollars, the payback period would be about 7 – 12 years with a yield increase of 20%. We have also generally been told that pattern tile with a good outlet can result in corn yield bushel gains of 30 – 40 bushels per acre.

D. Recommendations

We continue to recommend Option 3 as our preferred method of improvements. However, if Option 3 is deemed too costly we recommend Option 4 (open ditch and reduced tile improvements). Although we do not believe Option 5 (open ditch) is the best path forward; it would still be a step in the right direction, would provide drainage relief, and would provide the foundation for additional improvements in the future. With that being said, if both Option 3 and 4 are deemed to be too costly we would recommend that Option 5 be approved and pursued.

Sincerely,

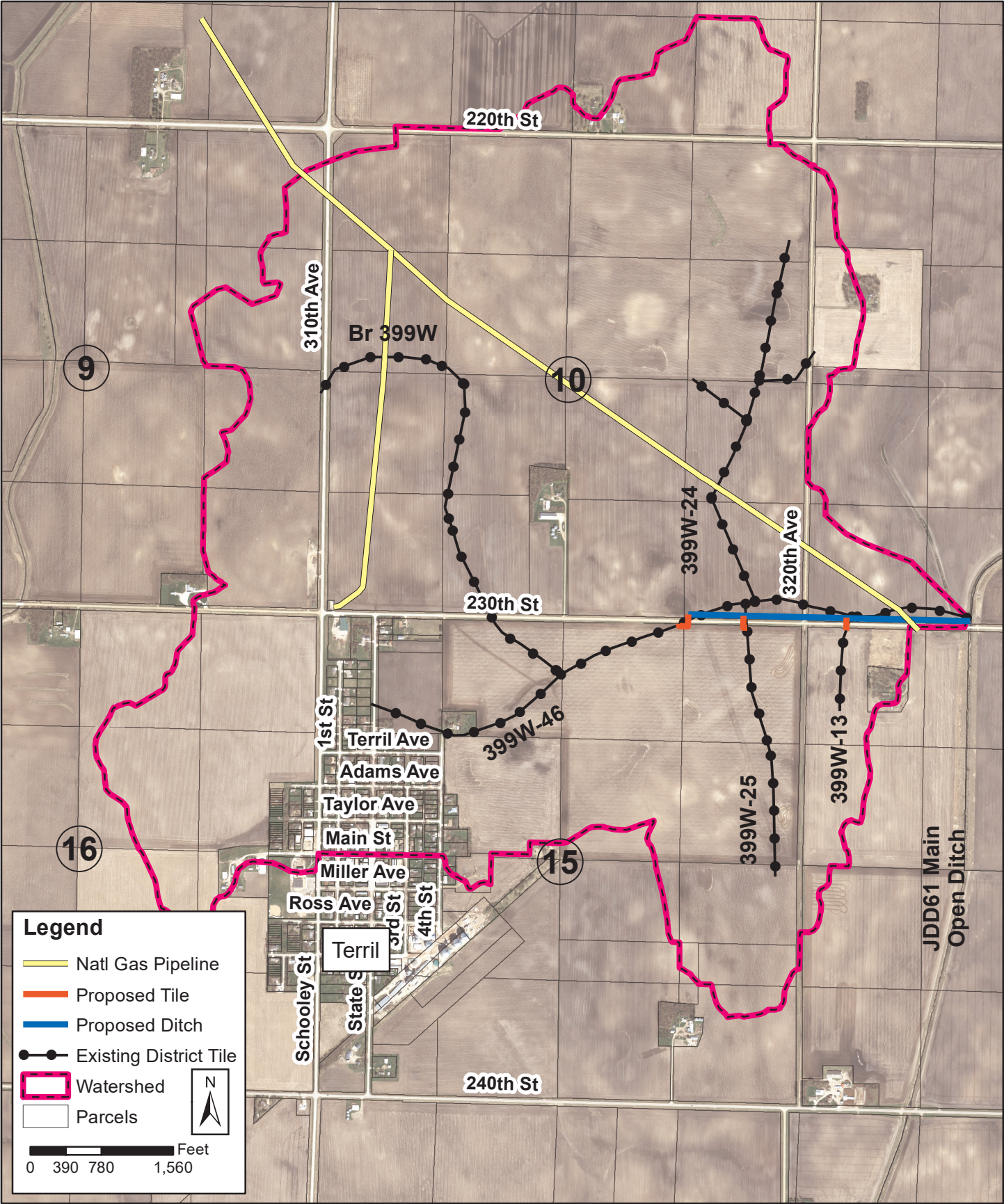
JACOBSON-WESTERGARD & ASSOCIATES INC.



Collin J. Klingbeil, P.E.

Encl. Option #5 Improvements Map
Option #5 Pre-class Dollars Maps

Joint Drainage District No. 61
Branch 399 West
Option 5: Open Ditch Improvements
Lloyd Township, Dickinson County, Iowa



Joint Drainage District No. 61 Branch 399W

Option 5: Open Ditch Improvements

Dollars Map Based on \$450,000 Levy

Lloyd Township, Dickinson County, Iowa

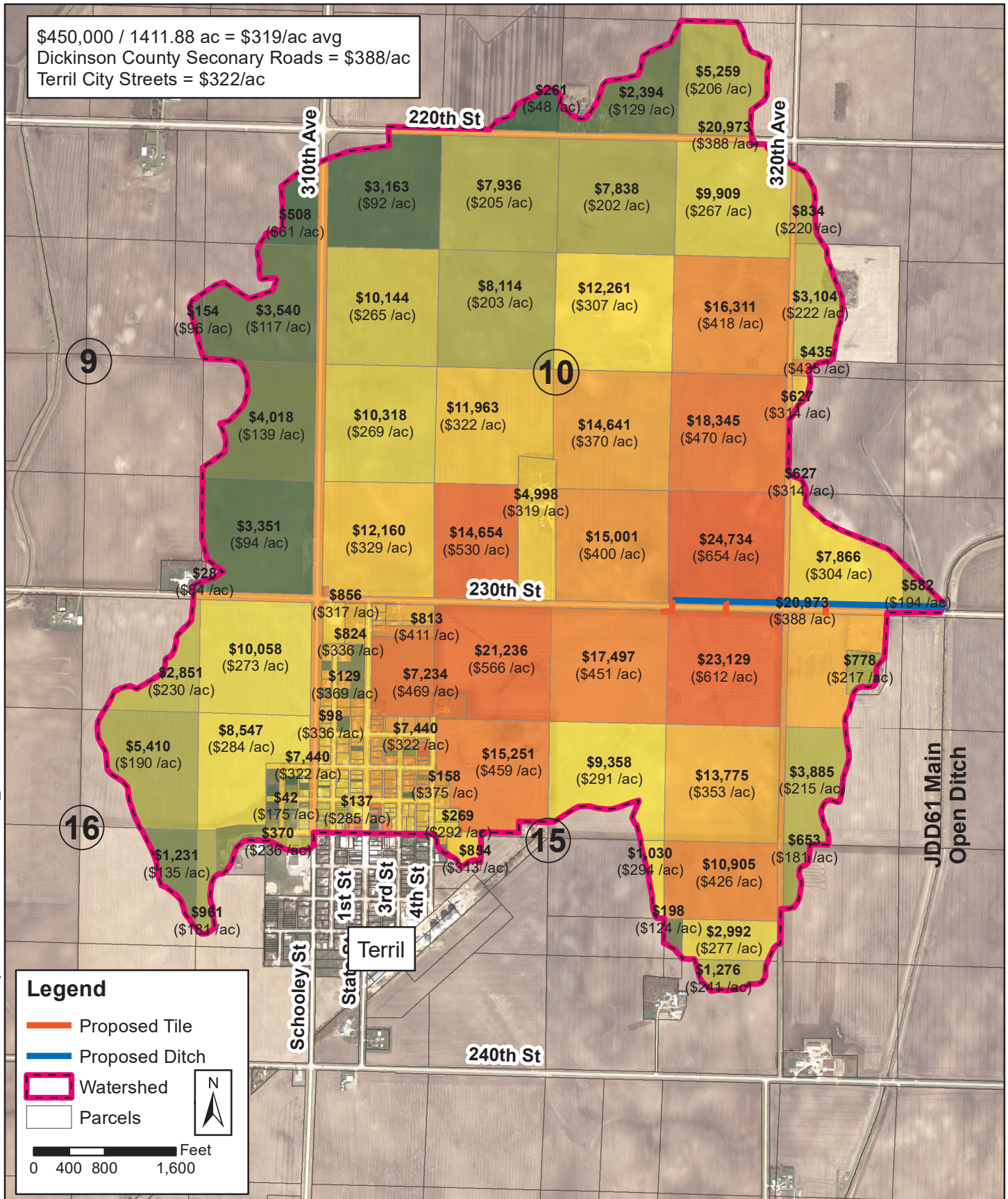


JACOBSON-WESTERGARD
& ASSOCIATES, INC.

Consulting Engineers & Land Surveyors

www.jacobson-westergard.com

\$450,000 / 1411.88 ac = \$319/ac avg
Dickinson County Secondary Roads = \$388/ac
Terril City Streets = \$322/ac



Joint Drainage District No. 61 Branch 399W

Option 5: Open Ditch Improvements

Dollars Map Based on \$450,000 Levy

Lloyd Township, Dickinson County, Iowa



JACOBSON-WESTERGARD
& ASSOCIATES, INC.

Consulting Engineers & Land Surveyors

www.jacobson-westergard.com

\$450,000 / 1411.88 ac = \$319/ac avg
Dickinson County Secondary Roads = \$388/ac
Terril City Streets = \$322/ac

