



**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"

November 26, 2025

RE: Amendment No. 3 to the 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:

During the September 15, 2025 public hearing the Option #5 drainage improvements presented in Amendment No. 2 to the engineer's report were approved. In general, the improvements approved included an approximately 3,100 foot new open ditch along the north side of 230th Street NE of Terril, along with short improvements to the Branch 399W, 399W-13, and 399W-25 tiles (mostly within road right-of-way in order to bring an improved outlet to the lands south of 230th Street).

At the hearing, one of the concerns was in regard to a natural gas pipeline that would be in conflict with the new open ditch. In order to eliminate the conflict, the pipeline would either need to be relocated/lowered under the new open ditch, or a reach of the open ditch be replaced with a culvert that would be installed underneath the existing natural gas pipeline. Based on Iowa drainage law it was believed the natural gas company would be responsible for these costs. Therefore, the costs were not included in the estimated project cost. It has since come to light that the code section primarily being relied upon (468.186) was not enacted until after the pipeline was installed, and likely cannot be retroactively applied. Our legal counsel now believes the drainage district is not in a strong position if litigation is pursued.

The main purpose of this Amendment No. 3 is to update the project cost estimate from Amendment No. 2 to include the cost of installing a 200 foot 72" diameter corrugated metal pipe (CMP) culvert underneath the natural gas pipeline. The total estimated cost of the project has increased by **\$70,000 (15.6% increase)**. Another hearing will be held on 1/6/26 where the landowners and Dickinson County Board of Supervisors, acting as trustees for the district, will discuss and decide whether to proceed with the project.

Cost Estimate Summary Table

Option	5	
Description	Estimate for September 15, 2025 hearing	Updated Estimate to include costs of pipeline crossing
Estimated Project Cost	\$450,000	\$520,000
Avg Cost Per Acre*	\$319	\$370
Avg Cost Per Acre over 20 years at 6% interest	\$28	\$33

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

Updated estimates can be calculated by multiplying the pre-class dollars shown in Amendment No. 2 by a factor of **1.156**.

As was discussed in Amendment No. 1, an open ditch is significantly less expensive than a large diameter tile (upwards of \$360,000). Even if the district pays the cost of the pipeline crossing culvert, the cost is still significantly lower than a tile improvement of the same reach. Obviously, we would prefer that JDD61 Br 399W not have to pay for the natural gas pipeline crossing, but nonetheless continue to believe the project is worthwhile.

At the public hearing we recommend the Dickinson County Board of Supervisors, as trustees, should once again approve the project despite the increased cost. We will then proceed with open ditch right-of-way (ROW) acquisition, finalize plans and specifications and proceed towards bid letting.

Sincerely,

JACOBSON-WESTERGARD & ASSOCIATES INC.



Collin J. Klingbeil, P.E.

Encl. Updated Option #5 Cost Estimate

ENGINEER'S ESTIMATE OF PROBABLE COST
J.D.D 61 BRANCH 399 WEST IMPROVEMENTS
DICKINSON COUNTY, IOWA
OPTION 5 IMPROVEMENTS - 11/26/25



SECTION 1: CONSTRUCTION ASSESSABLE TO PRIVATE LANDS

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
Branch 399 West Open Ditch					
1	OPEN DITCH EXCAVATION	23,473	CY	\$2.50	\$58,682.50
2	TOPSOIL STRIPPING AND RE-SPREAD	8,679	CY	\$4.50	\$39,055.50
3	SPOIL LEVELING, TWO-SIDED	29	STA	\$300.00	\$8,700.00
4	SEEDING & FERTILIZING, TWO-SIDED	29	STA	\$250.00	\$7,250.00
5	12" DIA. CMP TILE EXTENSION, 14 GAGE, ANNULAR CORRUGATIONS, RIVETED, GALVANIZED	100	LF	\$50.00	\$5,000.00
6	15" DIA. CMP SURFACE DRAIN, 14 GAGE, ANNULAR CORRUGATIONS, RIVETED, GALVANIZED	120	LF	\$60.00	\$7,200.00
7	FIELD ACCESS LANES	3	EA	\$1,500.00	\$4,500.00
8	REMOVE & DISPOSE BURIED ROCK PILE (EST 20 CY)	1	LS	\$3,000.00	\$3,000.00
9	GRANULAR SURFACING FOR ACCESS LANES	50	TN	\$40.00	\$2,000.00
10	RIPRAP, IDOT CLASS E	50	TN	\$60.00	\$3,000.00
11	REMOVE & DISPOSE 5X OLD WOODEN BRIDGE POSTS	1	LS	\$1,500.00	\$1,500.00
12	REMOVE & RE-LAY, 48" DIA. DUAL-WALL HDPE CULVERT	60	LF	\$35.00	\$2,100.00
13	84" DIA. CMP, 14 GAGE, 3"x1" ANNULAR CORRUGATIONS, RIVETED, GALVANIZED	80	LF	\$250.00	\$20,000.00
14	72" DIA. CMP, 14 GAGE, 3"x1" ANNULAR CORRUGATIONS, RIVETED, GALVANIZED	200	LF	\$220.00	\$44,000.00
15	IDOT CLASS I BEDDING STONE FOR PIPELINE	40	TN	\$40.00	\$1,600.00
16	NATURAL SAND (IDOT GRADATION 36) FOR PIPELINE	15	TN	\$40.00	\$600.00
Open Ditch Subtotal					\$208,188.00
Branch 399 West Tile					
17	42" DIA. RCP APRON W/ANIMAL GUARD & DISSIPATORS	1	EA	\$4,000.00	\$4,000.00
18	42" DIA. RCP, 2000D	40	LF	\$120.00	\$4,800.00
19	24" DIA. RCP, 2000D	148	LF	\$60.00	\$8,880.00
20	RCP TEE, 24" ON 42" DIA., FABRICATION ONLY	1	EA	\$1,900.00	\$1,900.00
21	RCP TEE, 24" ON 24" DIA., FABRICATION ONLY	1	EA	\$1,200.00	\$1,200.00
22	RCP TEE, 18" ON 24" DIA., FABRICATION ONLY	1	EA	\$1,200.00	\$1,200.00
23	42" DIA. RCP END CAP	1	EA	\$400.00	\$400.00
24	18" DIA. RCP END CAP	1	EA	\$175.00	\$175.00
25	CRUSH IN PLACE TILE, 18" DIA.	100	LF	\$7.00	\$700.00
Branch 399 West Subtotal					\$23,255.00
Branch 399 West-13 Tile					
26	15" DIA. CMP W/ANIMAL GUARD	20	LF	\$58.00	\$1,160.00
27	12" DIA. RCP, 2000D	7	LF	\$42.00	\$294.00
28	CRUSH IN PLACE TILE, 8" DIA.	50	LF	\$5.00	\$250.00
Branch 399 West-13 Subtotal					\$1,704.00

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
Branch 399 West-25 Tile					
29	24" DIA. CMP W/ANIMAL GUARD	20	LF	\$72.00	\$1,440.00
30	18" DIA. RCP, 2000D	6	LF	\$50.00	\$300.00
31	CRUSH IN PLACE TILE, 12" DIA.	10	LF	\$5.00	\$50.00
Branch 399 West-25 Subtotal					\$1,790.00
Miscellaneous Items					
32	TILE CONNECTIONS, LESS THAN 8" DIA.	2	EA	\$350.00	\$700.00
33	TILE CONNECTIONS, 8" DIA. AND LARGER	3	EA	\$500.00	\$1,500.00
34	EXPLORATORY EXCAVATION	10	HR	\$200.00	\$2,000.00
35	TRENCH STABILIZATION AND BEDDING STONE	100	TN	\$40.00	\$4,000.00
36	MOBILIZATION	1	LS	\$12,000.00	\$12,000.00

ESTIMATED SECTION 1 COST: \$255,000.00

SECTION 2: CONSTRUCTION ASSESSABLE TO COUNTY SECONDARY ROADS

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
37	42" DIA. RCP, 2000D	80	LF	\$132.00	\$10,560.00
38	18" DIA. RCP, 2000D	80	LF	\$50.00	\$4,000.00
39	12" DIA. RCP, 3000D	84	LF	\$45.00	\$3,780.00
40	18" DIA. RCP END CAP	1	EA	\$175.00	\$175.00
41	8'x10' RCB, PRECAST (320TH AVE)	48	LF	\$1,600.00	\$76,800.00
42	8'x10' RCB STRAIGHT END SECTION WITH CURTAIN WALL, PRECAST	2	EA	\$32,000.00	\$64,000.00
43	INTAKE, SW-512 (IDOT), CASE 1, 30" DIA.	1	EA	\$6,000.00	\$6,000.00
44	INTAKE CASTING, SW-604 (IDOT), TYPE 5 CASTING	1	EA	\$600.00	\$600.00
45	SALVAGE AND RE-LAY CMP, 24" DIA.	138	LF	\$30.00	\$4,140.00
46	24" DIA. CMP, 14 GAGE, 2 2/3" X 1/2" ANNULAR CORRUGATIONS, RIVETED	180	LF	\$60.00	\$10,800.00
47	CONNECTION OF 24" CMP TO RCB WINGWALL	1	EA	\$1,000.00	\$1,000.00
48	320TH AVE REGRADE	156	LF	\$15.00	\$2,340.00
49	TRENCH STABILIZATION AND BEDDING STONE	80	TN	\$40.00	\$3,200.00
50	NATURAL SAND (IDOT GRADATION 36)	100	TN	\$40.00	\$4,000.00
51	RIPRAP, IDOT CLASS E	40	TN	\$60.00	\$2,400.00
52	CRUSH IN PLACE TILE, 18" DIA. OR LESS	339	LF	\$5.00	\$1,695.00
53	SILT FENCE, INSTALLATION AND REMOVAL	60	LF	\$5.00	\$300.00
54	SEEDING & FERTILIZING ROAD DITCHES	1	LS	\$3,000.00	\$3,000.00
55	TRAFFIC CONTROL	1	LS	\$5,000.00	\$5,000.00
56	MOBILIZATION	1	LS	\$10,000.00	\$10,000.00

ESTIMATED SECTION 2 COST: \$214,000.00

ESTIMATED SUBTOTAL CONSTRUCTION COST	\$469,000.00
CONSTRUCTION CONTINGENCIES	\$31,000.00
ESTIMATED TOTAL CONSTRUCTION COST	\$500,000.00
ESTIMATED TOTAL ASSESSABLE CONSTRUCTION COST	\$275,000.00

NON-CONSTRUCTION COSTS

ENGINEERING - (REPORT, HEARINGS, PLANS & SPECS, BID LETTING, CONSTRUCTION, COMPLETION)	\$110,000.00
LEGAL, PUBLICATIONS, MAILINGS, ETC.	\$4,000.00
OPEN DITCH RIGHT-OF-WAY ACQUISITION	\$80,000.00
RE-CLASSIFICATION	\$10,000.00
TEMPORARY EASEMENT (8 Acres @ \$1,000/Acre)	\$8,000.00
OTHER DAMAGES	\$3,000.00
INTEREST	\$30,000.00
 ESTIMATED TOTAL DISTRICT COST	 <u>\$520,000.00</u>

AVERAGE COST PER ACRE (BASED ON 1,407 ACRES):	\$370
AVERAGE COST PER ACRE PER YEAR AT 6% INTEREST FOR 10 YEARS:	\$50
AVERAGE COST PER ACRE PER YEAR AT 6% INTEREST FOR 20 YEARS:	\$32.26