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April 29, 2024

Cerro Gordo County Board of Supervisors
Acting as Trustees for Drainage District No. 1
220 N Washington Ave,
Mason City, IA 50401

RE: Proposed Engineer's Report Addendum No. 1
Proposed Main Tile Repair
Drainage District No. 1, Cerro Gordo County
Project No.: OT7.131386

Trustees of Drainage District No. 1:

This report is intended to serve as Addendum No. 1 to the Engineer's Report for Drainage District No. 1, Cerro Gordo County, that was filed on February 12, 2024. At the public hearing on April 1, 2024 there were additional damage concerns brought to our attention that have since been reviewed. These additional locations of damage were investigated in the field and found on the Main Tile south of the crossing with 235th Street at the connection with Lateral D and additionally a significant portion of Lateral B was damaged. Attached to this report addendum is an updated estimate of project cost and an updated preliminary set of plans that outlines the new proposed repair project extents. The updated estimated construction costs are:

Main Tile - \$408,000.00
Main Tile 235th Street Crossing - \$34,500.00
Lateral B - \$69,000.00
Lateral D - \$8,000.00

Total Estimated Construction Costs - \$519,500.00
Total Estimated Assessable Construction Costs - \$485,000.00

It should be noted that under district projects, the construction amounts associated with crossing road right-of-way is the responsibility of the entity that controls that right-of-way. In this instance the road crossing construction cost would be the responsibility of the Cerro Gordo County Secondary Roads Department.

Additionally, based on the construction of the wetland and the relocation of the district facilities the Iowa Department of Agriculture and Land Stewardship has been contacted with a request for consideration of reimbursement for work occurring inside of the wetland easement area. As of April 25, 2024, that request was still being processed. However, permission has been formally granted by the Cerro Gordo County Soil and Water Conservation Board to enter the easement area in the event that the repair project proceeds.

Recommendation. After the additional field review and calculations of potential project cost as well as the additional engineering involved in the preliminary plans, it is recommended that the Trustees, with input from the benefitted landowners, do what is deemed economically viable and necessary to restore the drainage efficiency of the system to the original planned conditions. If additional work on district branch lateral facilities is considered such as Lateral B and Lateral D, the proper drainage code procedures would be to assess those project costs to the lands that are materially benefited by those facilities. In kind, the maintenance repair costs of the Main Tile should potentially be reevaluated for fairness and equitability in the event that a project proceeds.

Sincerely,

Bolton & Menk, Inc.

Tyler A. Conley, P.E.
Project Manager

**Engineer's Opinion of Probable Cost
Proposed Main Tile Repair
Drainage District No. 1
Cerro Gordo County, Iowa
2024**

DIVISION 1 - Main Tile Repair

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
101	Lateral Tile Connections, 10" Dia. Or Smaller	EA	12	\$400	\$4,800
102	Lateral Tile Connections, 12" Dia. Or Larger	EA	3	\$600	\$1,800
103	30" Dia. R.C.P. Elbow Section, Fabrication Only	EA	3	\$1,000	\$3,000
104	24" Dia. R.C.P. Elbow Section, Fabrication Only	EA	6	\$950	\$5,700
105	Spot Tile Exploration	HR	16	\$200	\$3,200
106	Trench Foundation Stone	TN	245	\$35	\$8,575
107	Drain Tile, Trenched, Class III R.C.P. 30" Dia.	LF	400	\$85	\$34,000
108	Drain Tile, Trenched, Class III R.C.P. 24" Dia.	LF	3,700	\$70	\$259,000
109	Drain Tile, Trenched, Class III R.C.P. 18" Dia.	LF	225	\$55	\$12,375
110	Crush Tile In Place	LF	4,100	\$5	\$20,500
111	Fence Cuts	EA	3	\$200	\$600
112	Mobilization	LS	1	\$17,700	\$17,700
113	Construction Contingency	LS	1	\$36,750	\$36,750

Estimated Construction Cost -Division 1 -Main Tile Repair

\$408,000

DIVISION 2 - County Road Crossing -235TH ST

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
201	Drain Tile, Trenched, Class III R.C.P. 24" Dia.	LF	100	\$75	\$7,500
202	Traffic Control	LS	1	\$1,500	\$1,500
203	Safety Closures	EA	2	\$100	\$200
204	Seeding and Fertiliation (Rural)	AC	0.1	\$5,000	\$500
205	Silt Fence, Installation And Removal	LF	200	\$5	\$1,000
206	Modified Subbase, 6"	SY	7.975	\$15	\$120
207	Granular Shoulders, Type A	TN	12.5	\$30	\$375
209	Pavement Markings	STA	0.45	750	\$338
210	Pavement removal	SY	159.5	\$10	\$1,595
211	Standard or slip-from PCC Pavement, Class 3, Durability, 8"	SY	159.5	70	\$11,165
212	Flowable Mortor	LF	100	35	\$3,500
213	Trench Compaction Testing	LS	1	3000	\$3,000
214	Mobilization	LS	1	\$500	\$500
215	Construction Contingency	LS	1	\$3,208	\$3,208

Estimated Construction Cost - Division 2 - County Road Crossing

\$34,500

**Engineer's Opinion of Probable Cost
Proposed Main Tile Repair
Drainage District No. 1
Cerro Gordo County, Iowa
2024**

DIVISION 3 - LAT B Repair

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
301	10" Dia. HDPE. Elbow Section, Fabrication Only	EA	3	\$200	\$600
302	Drain Tile, Trenched, HDPE. 10" Dia. Dual Wall	LF	1600	\$32	\$51,200
303	Crush Tile In Place	LF	1600	\$5	\$8,000
304	Mobilization	LS	1	\$3,000	\$3,000
305	Construction Contingency	LS	1	\$6,200	\$6,200

Estimated Construction Cost - Division 3 -LAT B Repair **\$69,000**

DIVISION 4 - LAT D Repair

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
401	Drain Tile, Trenched, HDPE 8" Dia. Daul Wall	LF	200	\$29	\$5,800
402	Crush Tile In Place	LF	200	\$5	\$1,000
403	Mobilization	LS	1	\$300	\$300
404	Construction Contingency	LS	1	\$900	\$900

Estimated Construction Cost - Division 4 - LAT B Repair **\$8,000**

Total Estimated Construction Costs **\$519,500**
Total Estimated Assessable Construction Costs **\$485,000**

Non-Construction Costs

Construction Related Damages	\$5,000
Basic Engineering Services	
Survey, Study & Report. Meetings & Hearing	\$45,000
Construction Plans, Specifications, & Bid Letting	\$40,000
Construction Engineering Services, Staking, and Inspection	\$30,000
Legal Services, Publications, Mailings, Etc..	\$3,400
Finance, Interest & Contingency	\$33,600
Estimated Total Non-Construction Costs	\$157,000

Estimated Total Project Cost Main Tile Repairs **\$642,000**
Estimated Average Cost Per Benefited Acre (1067.74) **\$601**
Estimated Average Cost Per Acre Per Year (10 years, 6% interest) **\$77.07**
Estimated Average Cost Per Acre Per Year (20 years, 6% interest) **\$49.45**