

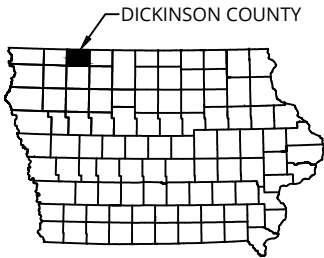
DICKINSON COUNTY

2025 DICKINSON COUNTY
DRAINAGE DISTRICT REPAIR PROJECT - DIVISION IV
PROJECT No.: E24088

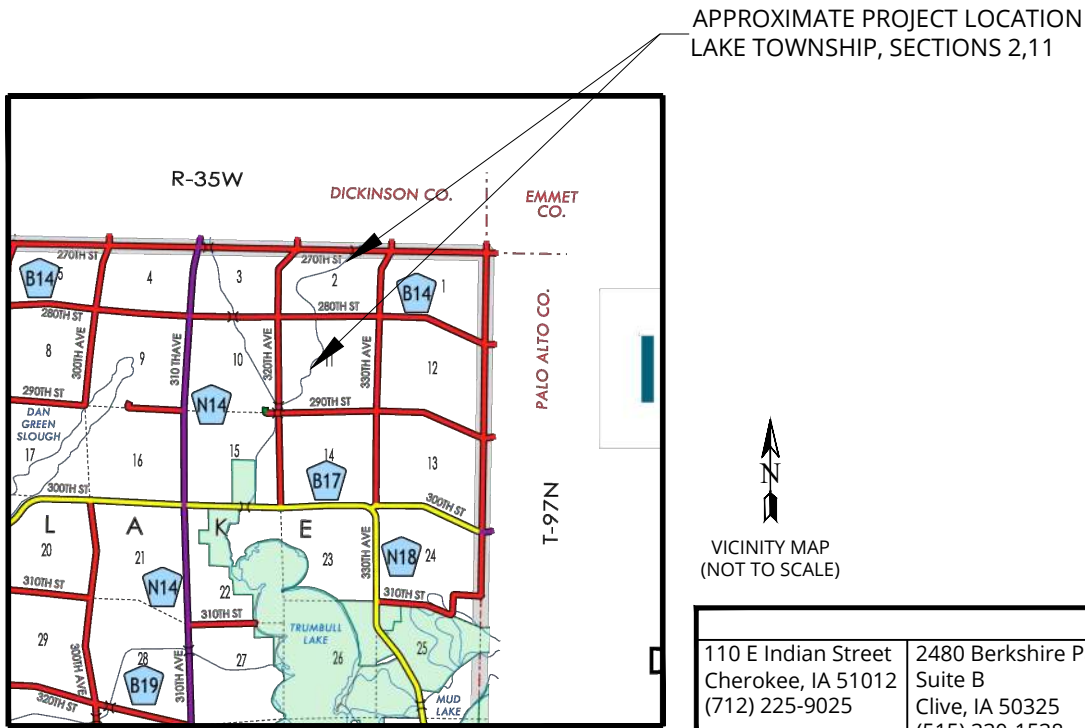
LETTING DATE:
TBD

PLANS OF IMPROVEMENTS FOR
DICKINSON COUNTY
BEI PROJECT No.: E24088

2025 DICKINSON COUNTY DRAINAGE DISTRICT REPAIR PROJECT - DIVISION IV
VARIOUS LOCATIONS WITHIN JOINT DRAINAGE DISTRICT #61 BRANCH 61

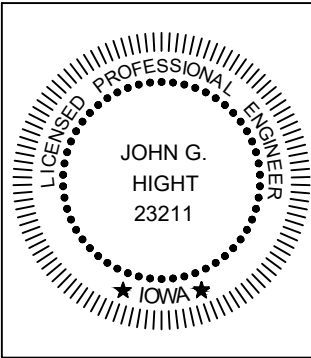


Unless otherwise specified, the Iowa Statewide Urban Design and Specifications (SUDAS) for Public Improvements, 2025 edition, followed by the Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, and applicable general supplemental specifications and special provisions shall apply to construction on this project. In case of conflicting requirements, the more stringent shall apply.



INDEX OF SHEETS	
NO.	DESCRIPTION
A.01	TITLE SHEET
A.02	LEGEND & GENERAL CONSTRUCTION NOTES
A.03	OVERALL PLAN VIEW
B.01	TYPICAL CROSS SECTIONS AND DETAILS
C.01	ESTIMATE OF PROJECT QUANTITIES AND ESTIMATE REFERENCE INFORMATION
D.01-D.03	PLAN SHEETS
U.01	DETAILS

Beck Engineering, Inc.				
110 E Indian Street Cherokee, IA 51012 (712) 225-9025	2480 Berkshire Parkway Suite B Clive, IA 50325 (515) 330-1538	806 Hartford PL SE Orange City, IA 51041 (712) 737-9225	301 10th Street Suite A Sheldon, IA 51201 (712) 631-4014	3301 Zenith Avenue PO Box 238 Spirit Lake, IA 51360 (712) 336-3596



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

JOHN G. HIGHT, P.E.
LICENSE NUMBER 23211 (date)

My license renewal date is December 31, 2025

Pages or sheets covered by this seal: All

Drawn	05-16-25 By JGH
Revised	
Sheet	A.01

2025 Dickinson County
Drainage District Repair Project - Division IV
Title Sheet



Beck Engineering, Inc.		
Cherokee, Iowa	Clive, Iowa	
Orange City, Iowa	Sheldon, Iowa	
Spirit Lake, Iowa		

Client:
Dickinson County
1802 Hill Avenue
Spirit Lake, IA 51360

LEGEND

	FOUND BOUNDARY MONUMENT AS NOTED		FG 1305.00	PROPOSED FINISH GRADE
	BUILDING SETBACK LIMITS		ME 1305.00	MATCH EXISTING GRADE
	EXISTING MAJOR CONTOUR		TOC 1305.00	PROPOSED TOP OF CURB GRADE
	EXISTING MINOR CONTOUR			
	PROPOSED CONTOUR			
	EXISTING CURB STOP		(UAC)	UNDISTURBED AFTER CONSTRUCTION
	PROPOSED CURB STOP		GAS	EXISTING GAS LINE
	EXISTING GATE VALVE		E	EXISTING UNDERGROUND ELECTRIC LINE
	PROPOSED GATE VALVE		OH	EXISTING OVERHEAD UTILITY LINE
	EXISTING FIRE HYDRANT		CLN	EXISTING CENTURY LINK NETWORK LINE
	PROPOSED FIRE HYDRANT		FO	EXISTING FIBER OPTIC LINE
	EXISTING IOWA HYDRANT		COM	EXISTING COMMUNICATION LINE
	EXISTING CISTERN		SAN	EXISTING SANITARY SEWER LINE
	EXISTING WATER METER PIT		SAN	PROPOSED SANITARY SEWER LINE
	EXISTING SANITARY SEWER CLEANOUT		SAN X	ABANDONED UTILITY PIPE
	EXISTING SANITARY SEWER MANHOLE		FM	EXISTING SANITARY SEWER FORCE MAIN
	PROPOSED SANITARY SEWER MANHOLE		ST	EXISTING STORM SEWER LINE
	EXISTING STORM SEWER MANHOLE			PROPOSED STORM SEWER LINE
	PROPOSED STORM SEWER MANHOLE			PROPOSED SUBDRAIN
	COMMUNICATION PEDESTAL		W	EXISTING WATER MAIN
	COMMUNICATION VAULT		W	PROPOSED WATER MAIN
	ELECTRIC PEDESTAL		ROW	RIGHT OF WAY LINE
	ELECTRIC VAULT			PROJECT BOUNDARY
	ELECTRIC METER		SF	PROPOSED SILT FENCE
	GAS METER		SC	PROPOSED FLOATING SILT CURTAIN
	GAS GATE VALVE		SL	PROPOSED SEDIMENT LOG
	UTILITY PEDESTAL		FS	PROPOSED FILTER SOCK
	UTILITY MANHOLE			EXISTING CHAIN LINK FENCE
	AIR CONDITIONER			EXISTING WOOD FENCE
	SPRINKLER CONTROL VALVE			EXISTING WOOD DECK
	EXISTING MAILBOX			EXISTING PAVERS
	EXISTING STREET LIGHT			PROPOSED PAVERS
	EXISTING LIGHT POLE			PROPOSED RIP-RAP
	EXISTING GUY WIRE			EXISTING DETECTABLE WARNING
	EXISTING UTILITY POLE			PROPOSED DETECTABLE WARNING
	EXISTING TRAFFIC LIGHT			PROPOSED SOD
	911 (ADDRESS) SIGN			EXISTING GRAVEL
	STREET OR INFORMATIONAL SIGN			PROPOSED GRAVEL
	DECIDUOUS TREE (DIA. GIVEN)			EXISTING PCC PAVEMENT
	CONIFEROUS TREE (DIA. GIVEN)			EXISTING ASPHALT PAVEMENT
	STUMP			
	BUSH			
	BRUSH			
	PROPOSED RETAINING WALL			
	EXISTING BUILDING FOOTPRINT			
	PROPOSED BUILDING FOOTPRINT			

DISTRICT	CONTACT NAME	CONTACT PHONE	CONTACT EMAIL
ESTHERVILLE COMMUNICATIONS	KYLE HOUGH	712-859-3300	khough@rvtc.co
TERRIL TELEPHONE COMPANY	DANA LORING	712-853-6121	dloring@terril.com
IOWA LAKES REGIONAL WATER	ADAM KUESTER	712-262-8847	adam.kuester@ilrw.org
IOWA LAKES ELECTRICAL COOP	KAY DAHL	712-362-2694	kayd@ilec.coop
RIVER VALLEY TELEPHONE	STEVE TRIMBLE	712-837-5522	trimble@ncn.net

WHERE PUBLIC UTILITY LINES AND FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER OF THOSE UTILITIES PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL PROVIDE ACCESS TO THOSE UTILITIES THAT REQUIRE SERVICE. UNDERGROUND UTILITIES AND STRUCTURES ARE SHOWN FROM LOCATES, SURVEYS AND RECORDS, AND SHALL BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THAT OTHERS MAY EXIST OF WHICH THE LOCATION IS NOT KNOWN. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND STRUCTURES AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR INTERFERENCE OR DELAY CAUSED BY UTILITY COORDINATION OR RELOCATION WORK.

THE CONTRACTOR SHALL CONTACT THE IOWA ONE-CALL SERVICE (1-800-292-8989) AT LEAST 48 HOURS PRIOR TO COMMENCING ANY WORK ON THE CONSTRUCTION SITE.

GENERAL CONSTRUCTION NOTES:
-HEAVY TRUCK TRAFFIC ON THE EXISTING ADJACENT PAVEMENTS SHALL BE KEPT TO THE MINIMUM NECESSARY FOR THE REQUIRED CONSTRUCTION OPERATIONS. ALL BASE AND EXISTING PAVEMENT REPAIRS NECESSARY DUE TO HAULING DURING CONSTRUCTION ACTIVITIES SHALL BE COMPLETED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. LIGHTER HAUL LOADS MAY BE REQUIRED TO PROTECT THE EXISTING SURFACES AND SHALL BE INCLUDED IN THE BID. NO COMPENSATION WILL BE MADE FOR ADDITIONAL HAULING ACTIVITIES OR PLACEMENT MACHINES/OPERATIONS THAT MAY BE REQUIRED TO PROTECT THE EXISTING SURFACES AND BASE MATERIALS.
-LOCATION OF UTILITIES IS APPROXIMATE. CONTRACTOR SHALL CONTACT IOWA ONE-CALL (1-800-292-8989) AT LEAST 48 HOURS PRIOR TO COMMENCING WORK ON THE PROJECT TO VERIFY LOCATION OF UTILITIES.
-NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR INTERFERENCE OR DELAY CAUSED BY UTILITY COORDINATION OR RELOCATION WORK.
-ALL EXISTING UTILITY POLES, STREET LIGHTS, PEDESTALS AND TRANSFORMERS, EXCEPT THOSE NOTED IN THE PLANS, SHALL REMAIN UNDISTURBED AND FUNCTIONAL DURING CONSTRUCTION.
-ALL WORK SHALL TAKE PLACE WITHIN THE CURRENT ADJACENT PUBLIC ROAD RIGHT-OF-WAY, EASEMENT AREAS OR PROJECT BOUNDARY AS SHOWN IN THE PLAN SHEETS. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR TO ITEMS THAT ARE DAMAGED OUTSIDE OF THIS AREA OR WITHIN SAID WORK ZONE THAT ARE NOT NOTED IN THE PLANS.
-THE CONTRACTOR WILL BE REQUIRED TO PROVIDE CONSTRUCTION ACCESS TO THE SITE. THIS SHALL INCLUDE REMOVING, SALVAGING AND REPLACING ANY REQUIRED ITEMS NECESSARY TO ACCOMMODATE CONSTRUCTION TRAFFIC.
-ACCESS TO THE ADJACENT PROPERTIES SHALL BE MAINTAINED TO THE FULL EXTENT POSSIBLE AT ALL TIMES DURING CONSTRUCTION. THIS SHALL REQUIRE KEEPING THE ADJACENT ROADWAYS AND AREAS CLEAN AND FREE OF EQUIPMENT AND DEBRIS.
-THE PROJECT AREA WILL BE CONTROLLED THROUGH TRAFFIC CONTROL DURING CONSTRUCTION. THE ADJACENT ROADWAYS SHALL REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION.
-IF THE PROJECT IS OPEN TO PROPERTIES ALONG THE PROJECT SITE, THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY DRIVEWAY RAMPS AND ACCESSES DURING CONSTRUCTION. RAMPS CAN BE CONSTRUCTED OF MODIFIED SUBBASE TO BE USED FOR LATER GRADING OPERATIONS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS TEMPORARY ACCESS TO LOCAL RESIDENTS.
-THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN SANITARY SEWER AND WATER SERVICES TO ALL ADJACENT PROPERTIES TO THE FULL EXTENT POSSIBLE. A WRITTEN NOTICE SHALL BE PROVIDED TO THE CITY AND ANY INDIVIDUAL PROPERTY OWNERS INFORMING OF AN EXPECTED SERVICE INTERRUPTION. THIS NOTICE SHALL BE GIVEN AT LEAST 24 HOURS PRIOR TO SERVICE INTERRUPTION.
-ALL STRUCTURES AND FIXTURES, INCLUDING, BUT NOT LIMITED TO, MANHOLE COVERS AND STORM SEWER INTAKES, SHALL BE CLEAN AND FREE OF ALL DEBRIS AFTER CONSTRUCTION ACTIVITIES.
-THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA TO PREVENT THE SPREAD OF DUST. SEE SECTION 1107.07 OF THE IOWA DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION.
-ALL VEGETATION SHALL BE SCARIFIED PRIOR TO GRADING OF THE PROJECT. EXCEPT FOR BACKFILLING, NO VEGETATION SHALL BE PLACED UNDER, OR WITHIN 2 FEET OF ANY PAVING.
-ALL FILL MATERIAL SHALL BE COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY UNLESS STATED OTHERWISE.
-THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE OF THE CONSTRUCTION LIMITS AS SHOWN IN THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL PROTECT ALL GRASS AREAS, TREES, BUSHES AND LANDSCAPING WITHIN THE WORK ZONE UNLESS NOTED OTHERWISE IN THE PLANS. DAMAGE TO SUCH ITEMS WILL BE AT THE CONTRACTOR'S EXPENSE.
-CONTRACTOR SHALL PROTECT EXISTING TREES AND SUCH THAT ARE NOT NOTED TO BE CLEARED/GRUBBED.
-THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE UNDISTURBED AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING, AND SERVICE AREAS WILL BE SUBJECT TO APPROVAL OF THE ENGINEER.
-ALL TOPSOIL IN THE DISTURBED AREAS SHALL BE FREE OF ROCK AND DEBRIS AND SHALL BE SUITABLE FOR THE ESTABLISHMENT OF VEGETATION, SOD AND SEEDING OPERATIONS, SUBJECT TO APPROVAL OF THE ENGINEER.
-ANY WASTE MATERIALS THAT ARE GENERATED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT SITE. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS REMOVAL.
-INSTALLATION OF THE EROSION CONTROL DEVICES MAY REQUIRE MULTIPLE MOBILIZATIONS. THESE ITEMS MUST BE INSTALLED AS SPECIFIED AND NO ADDITIONAL PAYMENT WILL BE MADE FOR MULTIPLE MOBILIZATIONS.
-OWNER WILL PROVIDE CONSTRUCTION SURVEY AND QUALITY CONTROL TESTING.

2025 Dickinson County
Drainage District Repair Project - Division IV
Legend, General Construction Notes

Drawn	05-16-25 By JGH	Checked by	
Revised		LJL	
Sheet A.02		Project No.	E24088

Beck Engineering, Inc.

Cherokee, Iowa

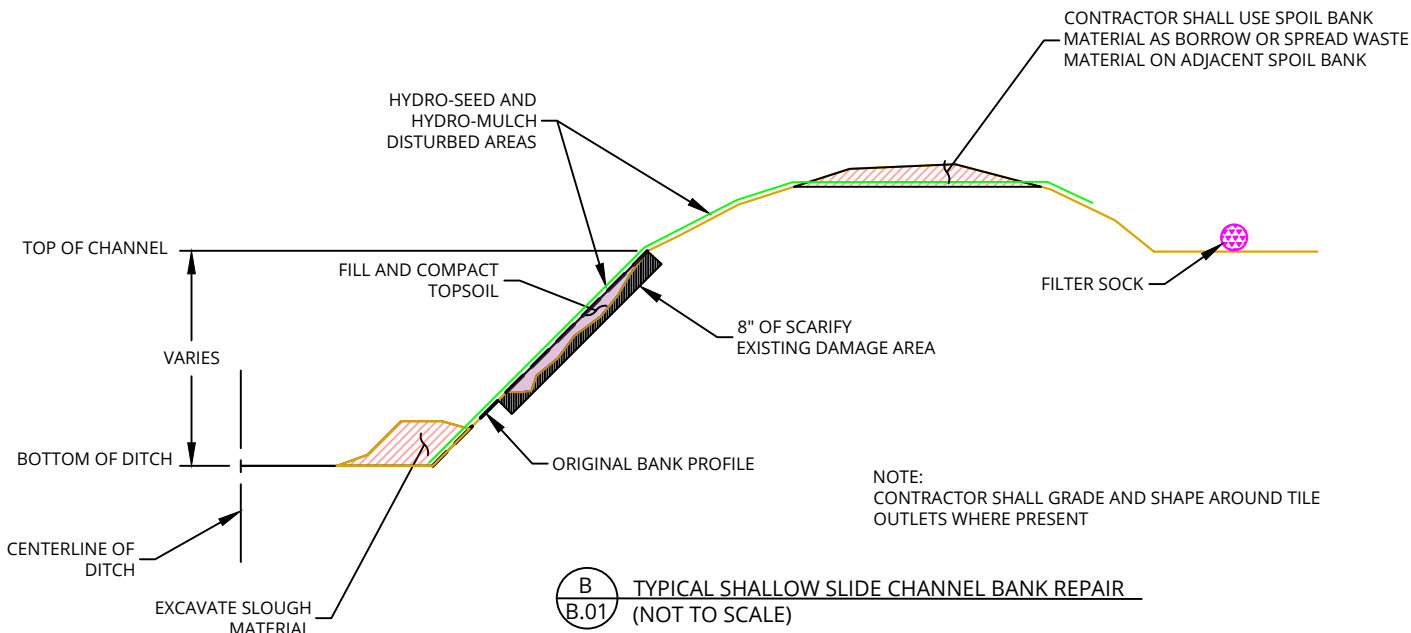
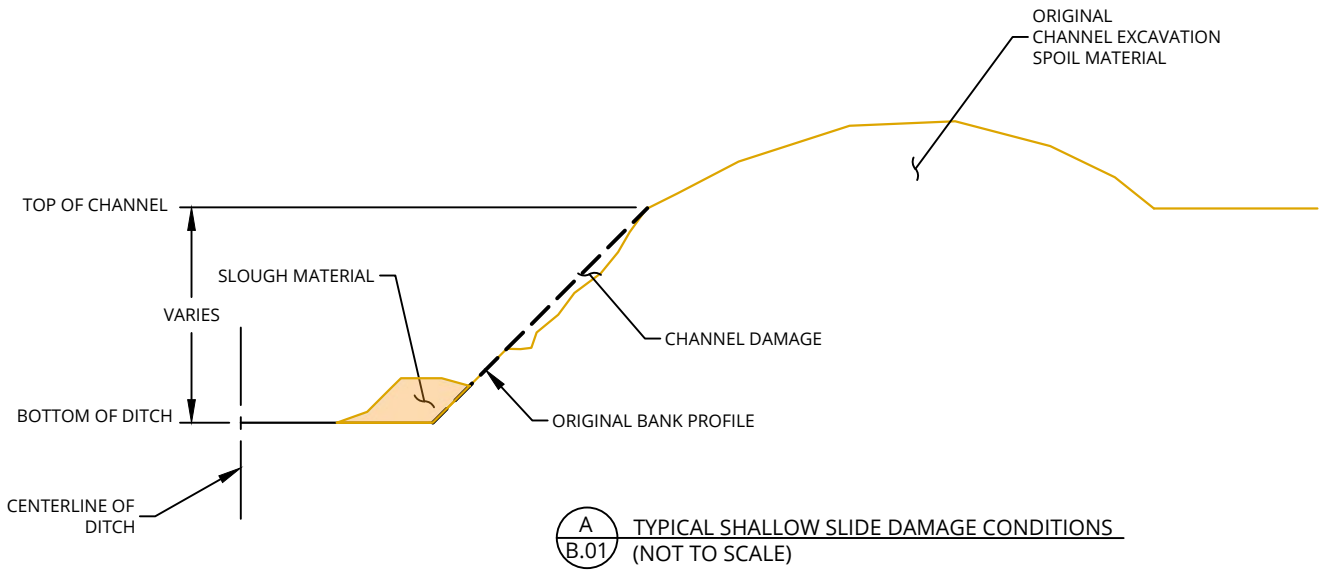
Orange City, Iowa

Spirit Lake, Iowa

Client:

Dickinson County
1802 Hill Avenue
Spirit Lake, IA 51360





Drawn	05-16-25 By JGH	Checked by	
Revised		LJL	
Sheet B.01		Project No.	E24088

2025 Dickinson County
Drainage District Repair Project - Division IV
Typical Cross Sections and Details



Beck Engineering, Inc.	
Cherokee, Iowa	Clive, Iowa
Orange City, Iowa	Sheldon, Iowa
Spirit Lake, Iowa	

Client:
Dickinson County
1802 Hill Avenue
Spirit Lake, IA 51360

ESTIMATED PROJECT QUANTITIES - DIVISION IV - JOINT DRAINAGE DISTRICT #61, BRANCH 61				
ITEM NO.	ITEM CODE	ITEM DESCRIPTION	UNIT	QUANTITIES
1	SPECIAL	SHALLOW SLIDE BANK CHANNEL BANK REPAIR	LF	565
2	9010-A	CONVENTIONAL SEEDING, SEEDING, FERTILIZING, NON CRP DRAINAGE DITCH	AC	0.8
3	9040-D-1	FILTER SOCK, 8"	LF	714
4	9040-D-2	FILTER SOCK, REMOVAL	LF	714
5	9040-Q-2	EROSION CONTROL MULCHING, HYDRO-MULCH	AC	0.8
6	11,020-A	MOBILIZATION	LS	1

ESTIMATE REFERENCE INFORMATION - DIVISION IV - JOINT DRAINAGE DISTRICT #61, BRANCH 61		
ITEM NO.	ITEM CODE	ITEM DESCRIPTION
1	SPECIAL	SHALLOW SLIDE BANK CHANNEL REPAIR Bid item shall include all equipment, material and labor required to repair bank as shown in the typical sections. Bid item shall be paid based upon linear foot of bank repair and shall include, but not limited to; a uniform 8" of scarification of the existing damaged areas prior to fill placement, all required on-site excavation of slough material, excavation borrow of waste bank, excavation of bank for reconstruction. All fill material shall be compacted to a minimum of 95% Standard Proctor Density. Borrow material shall be from the owner supplied location shown in the plan sheets. Material shall be provided by the owner at no charge to the contractor. No payment shall be made for overhauling. Bid item shall include requirements for temporary access and coordination with landowners to complete the repairs, including the temporary removal and replacement of any fencing or channel crossing.
		CONVENTIONAL SEEDING, SEEDING, FERTILIZING, NON CRP DRAINAGE DITCH Bid item includes areas that are disturbed during construction. Seed areas with Type 2 Seed Mixture as specified in Section 9010-2.02 of the SUDAS Standard Specifications. Seed and fertilizer shall be placed conventionally.
2	9010-A	CONVENTIONAL SEEDING, SEEDING, FERTILIZING, NON CRP DRAINAGE DITCH Bid item includes areas that are disturbed during construction. Seed areas with Type 2 Seed Mixture as specified in Section 9010-2.02 of the SUDAS Standard Specifications. Seed and fertilizer shall be placed conventionally.
3	9040-D-1	FILTER SOCK, 8" Bid item includes all labor and material necessary for the complete installation of 8" filter sock as shown on the plans or as directed. Filter sock shall be continuous. Bid item shall include the removal of sediment and debris during the duration of construction. Filter socks shall be in accordance with Section 9040 of the SUDAS Standard Specifications.
4	9040-D-2	FILTER SOCK, REMOVAL Bid item includes all labor necessary for the complete removal of 8" filter sock. Filter sock shall remain in place during the duration of construction operations until substantial completion is determined or as directed by the Engineer and once vegetation has been established to a minimum coverage of 70% along the entire project site.
5	9040-Q-2	EROSION CONTROL MULCHING, HYDRO-MULCH Bid item shall include all equipment, material, and labor required for application of the hydro-mulch. Hydro-mulch shall be Flexterra HP-FGM from Profile. Contractor shall apply product per manufacturer recommendations. Hydro-mulch shall be uniformly placed at a rate of 3500lbs/acre.
6	11,020-A	MOBILIZATION Refer to Section 11,020 of the SUDAS Standard Specifications. Shall include preparatory work and operations of all items under the contract.

Drawn	05-16-25 By JGH	Checked by	2025 Dickinson County Drainage District Repair Project - Division IV Estimate of Project Quantities and Estimate Reference Information
Revised		LJL	
		Project No.	
Sheet C.01		E24088	



Beck Engineering, Inc.	
Cherokee, Iowa	Clive, Iowa
Orange City, Iowa	Sheldon, Iowa
Spirit Lake, Iowa	

Client:	Dickinson County 1802 Hill Avenue Spirit Lake, IA 51360
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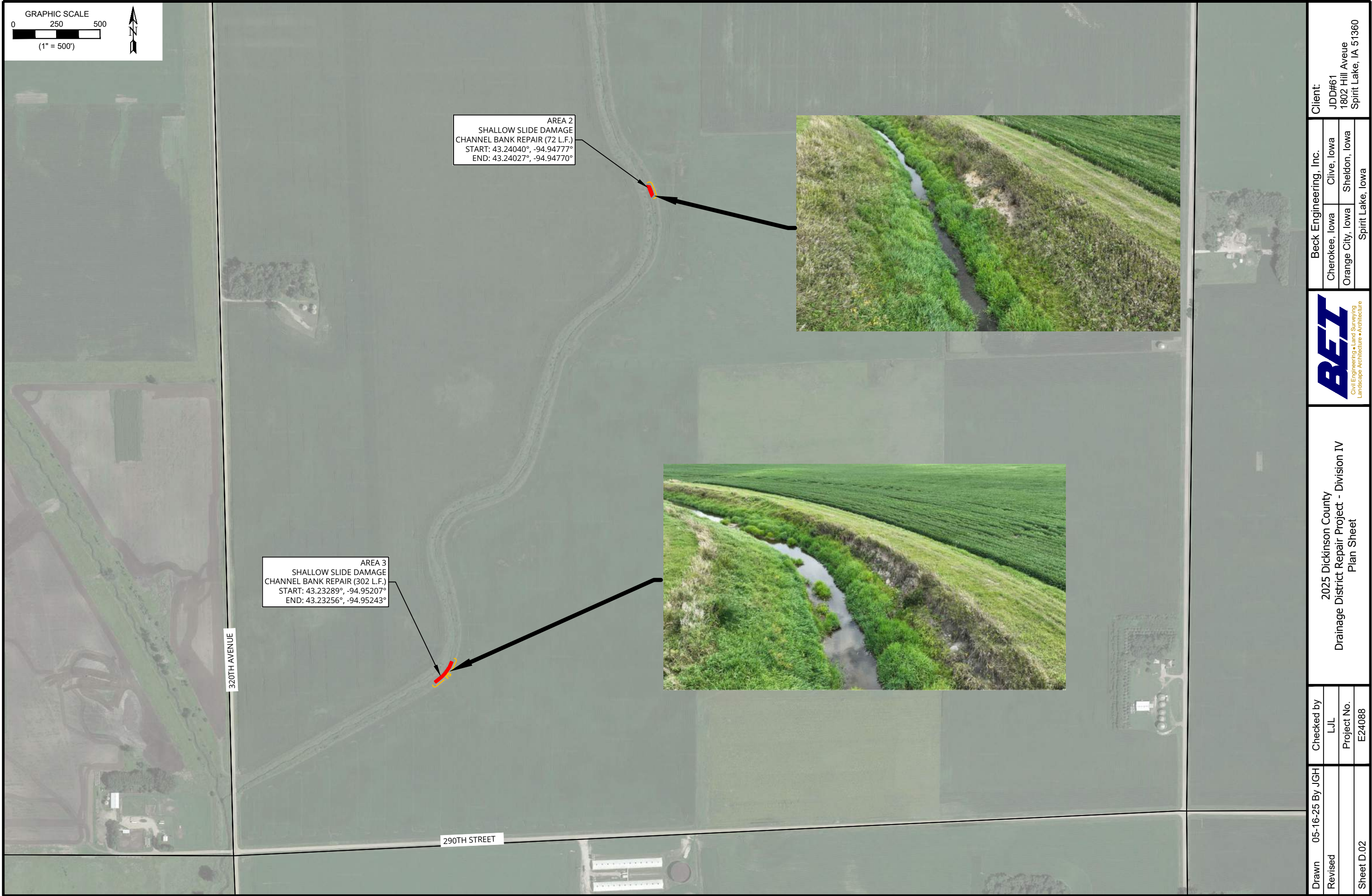
Drawn	05-16-25 By JGH	Checked by	
Revised		LJL	
Sheet D.01		Project No.	E24088

2025 Dickinson County
Drainage District Repair Project - Division IV
Plan Sheet



Beck Engineering, Inc.	
Cherokee, Iowa	Clive, Iowa
Orange City, Iowa	Sheldon, Iowa
Spirit Lake, Iowa	

Client:
Dickinson County
1802 Hill Avenue
Spirit Lake, IA 51360



GRAPHIC SCALE

0125250

(1" = 250')

N

3330TH AVENUE

AREA 5
SHALLOW SLIDE DAMAGE
CHANNEL BANK REPAIR (122 L.F.)
START: 43.26215°, -94.92849°
END: 43.26196°, -94.92886°



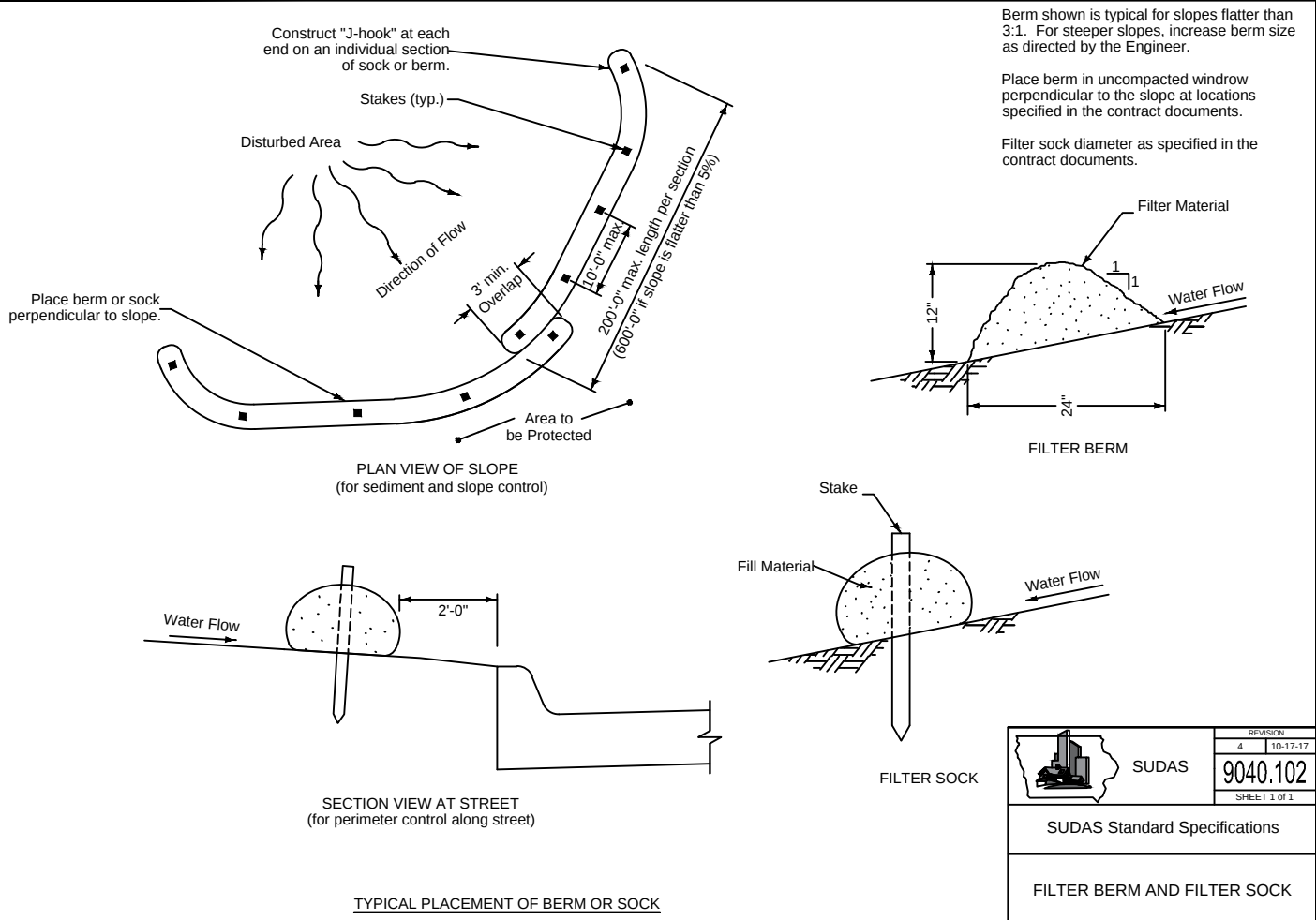
Drawn	05-16-25 By JGH	Checked by
Revised		LJL
Sheet D.03		Project No. E24088

2025 Dickinson County
Drainage District Repair Project - Division IV
Plan Sheet



Beck Engineering, Inc.		
Cherokee, Iowa	Clive, Iowa	
Orange City, Iowa	Sheldon, Iowa	
Spirit Lake, Iowa		

Client:
Dickinson County
1802 Hill Avenue
Spirit Lake, IA 51360



Drawn	03-06-2025 By JGH	Checked by	
Revised		LJL	
Sheet U.01		Project No.	E24088

2025 Dickinson County
Drainage District Repair Project - Division IV
Details



Beck Engineering, Inc.	
Cherokee, Iowa	Clive, Iowa
Orange City, Iowa	Sheldon, Iowa
Spirit Lake, Iowa	

Client:
Dickinson County
1802 Hill Avenue
Spirit Lake, IA 51360