

DRAWING APPROVAL

ALL SHOP DRAWINGS AND FALSEWORK DRAWINGS THAT REQUIRE APPROVAL SHALL BE APPROVED BY THE CONTRACTOR, THEN ACCEPTED BY THE;
DUBUQUE COUNTY ENGINEER
1225 Selppe Road
Dubuque, Iowa 52002-9660
Phone; 563-557-7283
Fax; 563-557-1973

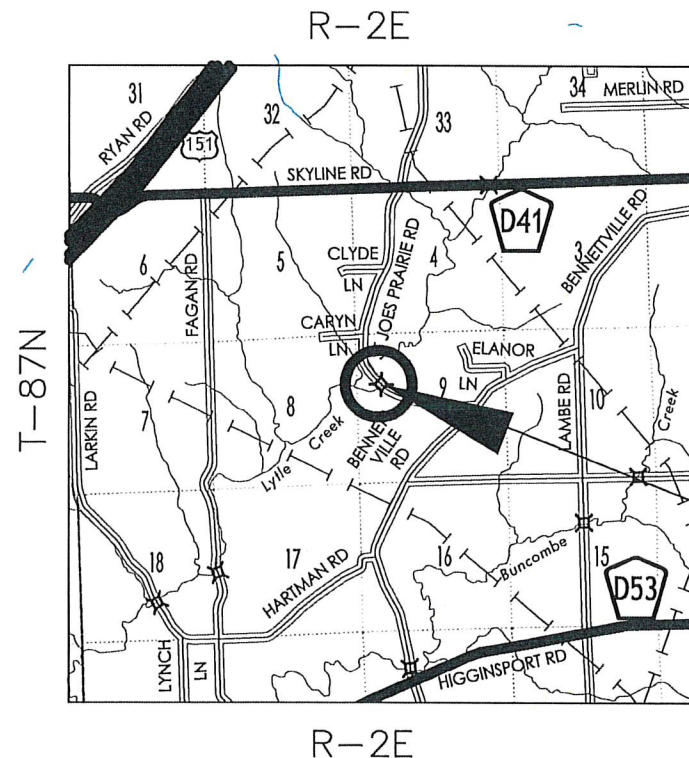
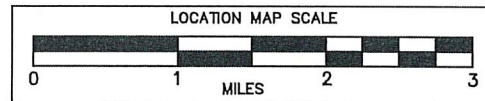
THESE SHOP DRAWINGS SHALL NOT BE SENT TO I.D.O.T. OFFICE OF BRIDGES AND STRUCTURES.

SECTION 404 PERMIT AND CONDITIONS

CONSTRUCT THIS PROJECT ACCORDING TO REQUIREMENTS OF THE U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT 14. NATION WIDE PERMIT 14 CONDITIONS CAN BE FOUND AT:
<http://www.mvr.usace.army.mil/Missions/Regulatory/Permits/>.
REFERENCE NUMBER; CEMVR-RD-2026-128
THE U.S.ARMY CORPS OF ENGINEERS RESERVES THE RIGHT TO VISIT THE SITE WITHOUT PRIOR NOTICE.



Maquoketa Valley Rural Electric
109 North Huber Street
Anamosa, Iowa 52205
Matt Kurt 319-820-0368



PROJECT LOCATION
STA. 34+00 to Sta. 38+00



HIGHWAY DIVISION
PLANS OF PROPOSED IMPROVEMENT ON THE
FARM TO MARKET ROAD SYSTEM
DUBUQUE COUNTY
BRIDGE REPLACEMENT- C.C.S.

100'-00" X 30'-00" C.C.S. BRIDGE
WITH A 0° SKEW

FHWA # 145701

Project Number: BROS-CO31(133)--5F-31
On St. Joe's Prairie Road over Lytle Creek
S9, T87, R2E

REFER TO THE PROPOSAL FORM FOR LIST OF THE APPLICABLE SPECIFICATIONS

REFER TO SHEET C.02 FOR LIST OF STANDARD ROAD PLANS

TRAFFIC CONTROL PLAN:

THIS ROAD WILL BE CLOSED TO THROUGH TRAFFIC BUT OPEN TO LOCAL TRAFFIC DURING CONSTRUCTION AS PROVIDED FOR IN ARTICLE 1107.08, 2023 STANDARD SPECIFICATIONS PLUS CURRENT SUPPLEMENTAL SPECIFICATIONS. TRAFFIC CONTROL DEVICES, PROCEDURES, LAYOUTS, SIGNING AND PAVEMENT MARKINGS INSTALLED WITHIN THE LIMITS OF THIS PROJECT SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC) CHAPTER 130."

Scales: As Noted

Project Number: BROS-CO31(133)--5F-31

FHWA# 145701

INDEX OF SHEETS

No.	Description	10 Sheets
A.01	TITLE SHEET	
B.01	TYPICAL SECTIONS	
C.01	ESTIMATED QUANTITIES	
C.02	GENERAL NOTES, STANDARD ROAD PLANS	
C.03	MISC. TABULATION BLOCKS	
C.04	DECK GRADES	
D.01	PLAN AND PROFILE	
Q.01	BORING LOGS	
Q.02	BORING LOGS	
V.01	SITUATION PLAN, LONG. SECTION AND HYDROLOGY	

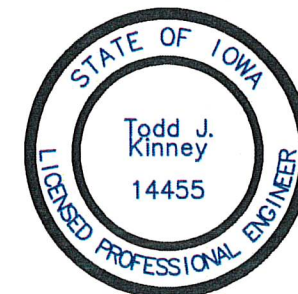
MILAGE SUMMARY

DIV.	LOCATION	LIN. FT.	MILES
	FROM STA. 34+00 TO 35+50.5	150.50	0.0285
	FROM STA. 35+50.5 TO STA. 36+53.5 (BRIDGE)	103.00	0.0195
	FROM STA. 36+53.5 TO STA. 38+00	146.50	0.0277
	TOTAL	400.00	0.0757

BRIDGE STANDARDS

(May be obtained at Bridge Design Services)

STANDARD	DATE ISSUED	ATEST REVISION	STANDARD	DATE ISSUED	ATEST REVISION
J30-01-06	NOV. 2006	09-2020	J30-24-06	NOV. 2006	09-2020
J30-01A-06	NOV. 2006	09-2020	J30-34-06	NOV. 2006	09-2020
J30-08E-06	NOV. 2006	09-2020	J30-39-06	NOV. 2006	09-2020
J30-09E-06	NOV. 2006	09-2020	J30-40-06	NOV. 2006	09-2020
J30-20-06	NOV. 2006	09-2020	J30-41-06	NOV. 2006	09-2020
J30-21-06	NOV. 2006	09-2020	J30-42-06	NOV. 2006	09-2020
J30-23-06	NOV. 2006	09-2020	P10L		06-2025



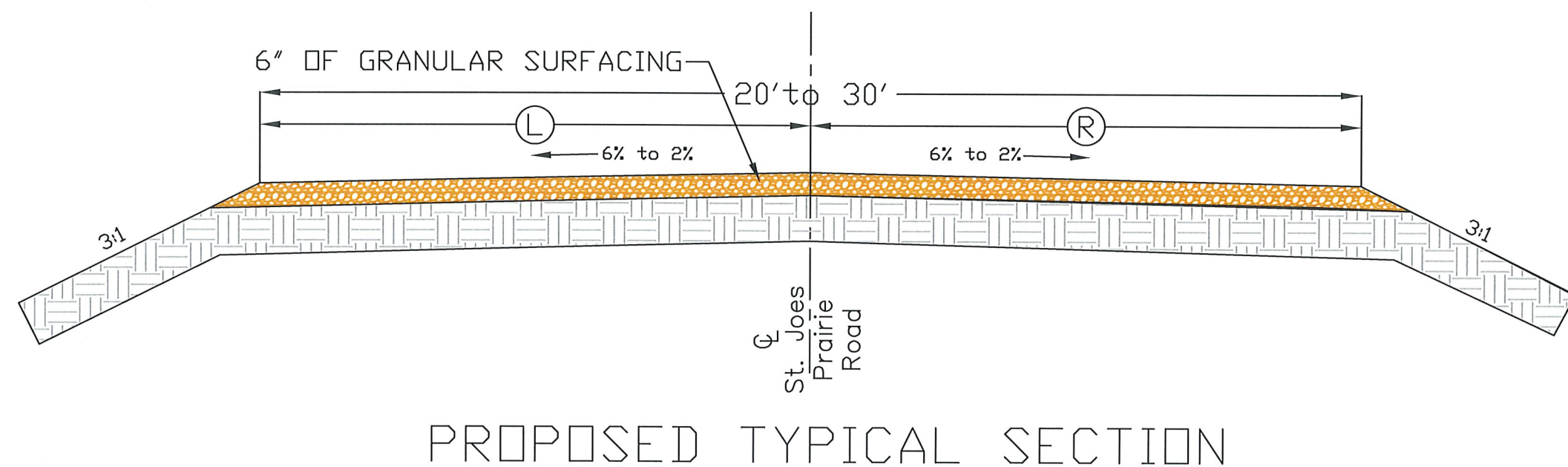
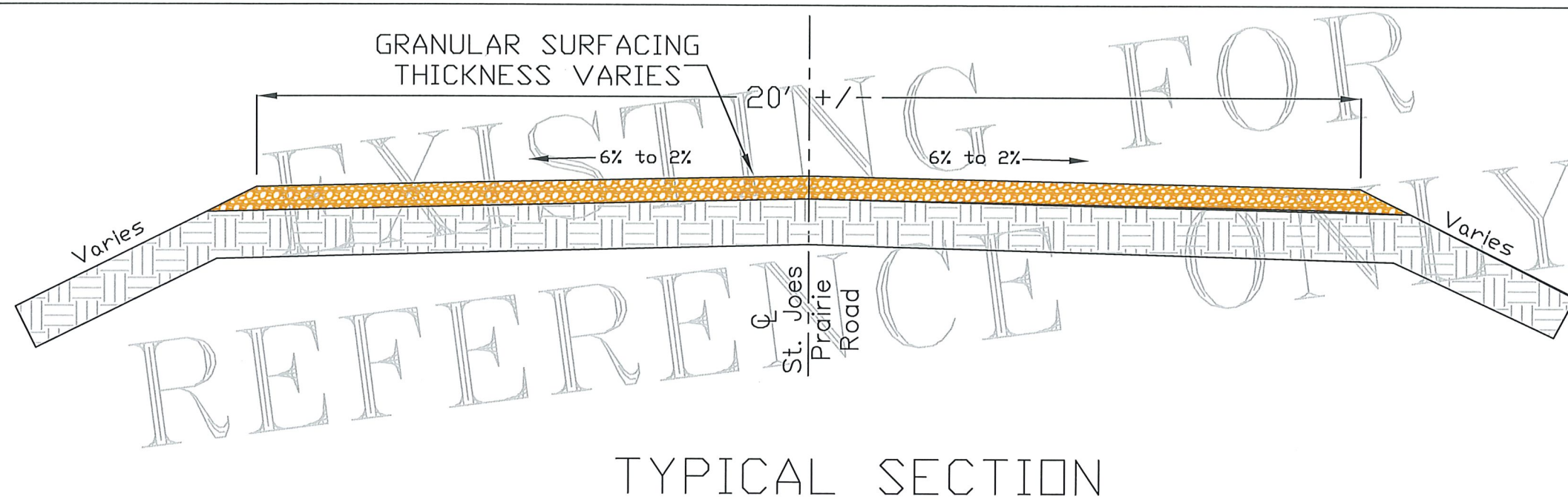
I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Todd J. Kinney
Todd J. Kinney, P.E.
7/21/26
Date

My license renewal date is December 31, 2027
Pages or sheets covered by this seal:
A.01, B.01, C.01, C.02, C.03, C.04, D.01, Q.01, Q.02 & V.01

Approved Dubuque County
Board of Supervisors

Wayne Keim
Ch. Mulvaney



LOCATION		DIMENSIONS		SLOPES	
ROAD IDENTIFICATION	STATION TO STATION		LEFT	RIGHT	FS (Rt.) FS (Lt)
St. Joes Prairie Road	34+00	34+75	10'	10'	3:1 3:1
St. Joes Prairie Road	34+75	35+50.5	10' to 15'	10' to 15'	3:1 3:1
St. Joes Prairie Road	36+53.5	37+14	15' to 10'	15' to 10'	3:1 3:1
St. Joes Prairie Road	37+14	38+00	10'	10'	3:1 3:1

100' 00" x 30' 00" C.C.S. Bridge

Located on St. Joes Prairie Road over Lytle Creek

ABUTMENTS; INTEGRAL PIERS; P10L, TYPE 3

30' 06" END SPANS 39'00" CENTER SPAN

TYPICAL SECTIONS

STATION; 36+02 SKEW; 0°

DUBUQUE COUNTY, IOWA FHWA#; 145701

ESTIMATED PROJECT QUANTITIES				
PROJECT NUMBER: BROS-CO31(133)--5F-31				
100'00" x 30'00" C.C.S. Bridge, 0 degree Skew				
REF.#	ITEM CODE	ITEM DESCRIPTION	UNIT	TOTAL
1	2101-0850001	CLEARING AND GRUBBING	ACRE	0.30
2	2104-2713020	EXCAVATION, CL 13, CHANNEL	C.Y.	794.00
3	2312-8260051	GRANULAR SURFACING, ON ROAD, CLASS A CRUSHED STONE	TON	580.00
4	2401-6745625	REMOVAL OF EXISTING BRIDGE	L.S.	1.00
5	2402-2723000	EXCAVATION, CLASS 23	C.Y.	128.00
6	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	C.Y.	227.80
7	2404-7775005	REINFORCING STEEL, EPOXY COATED	LBS.	58942.00
8	2414-6424110	CONCRETE BARRIER RAILING	L.F.	222.00
9	2417-1040042	CULVERT, C.M.P. ENTRANCE PIPE 42 IN. DIA.	L.F.	110.00
10	2501-0201042	PILES, STEEL, HP10x42	L.F.	830.00
11	2501-5478042	CONCRETE ENCASEMENT OF STEEL H-PILES, HP10x42 (P10L, TYPE 3)	L.F.	265.50
12	2507-3250005	ENGINEERING FABRIC	S.Y.	426.00
13	2507-6800061	REVTMENT, CLASS "E" RIP-RAP	TON	450.00
14	2519-3280000	FENCE, FIELD	L.F.	400.00
15	2519-3300400	FIELD FENCE BRACE PANEL	EACH	8.00
16	2519-3300700	FENCE, TEMPORARY	L.F.	400.00
17	2524-9100030	OBJECT MARKER, TYPE 3	EACH	4.00
18	2528-2518000	SAFETY CLOSURE	EACH	4.00
19	2528-8445110	TRAFFIC CONTROL	L.S.	1.00
20	2533-4980005	MOBILIZATION	L.S.	1.00
21	2599-9999009	DIRT AND ROCK DRILLING	L.F.	345.00
22	2601-2634100	MULCH	ACRE	0.30
23	2601-2636043	SEEDING AND FERTILIZING (RURAL)	ACRE	0.30
24	2601-2642100	STABILIZING CROP - SEEDING AND FERTILIZING	ACRE	0.30
25	2602-0000020	SILT FENCE	L.F.	200.00
26	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL, 12 IN. DIA.	L.F.	400.00

ESTIMATED REFERENCE INFORMATION		
Data listed is for informational purposes only and shall not constitute a basis for any extra work orders		
NO.	ITEM CODE	DESCRIPTION
1	2101-0850001	CLEARING AND GRUBBING; INCLUDES ANY FENCE LOCATED IN THE R.O.W.
2	2104-2713020	EXCAVATION, CLASS 13 CHANNEL; INCLUDES CLEANING CHANNEL UPSTREAM AND DOWNSTREAM TO THE LIMITS SHOWN ON SHEET D.01 WITH POSSIBLY SOME OF THE MATERIAL TO BE USED TO BUILD OUT THE FORESLOPES. CONTRACTOR SHALL BID THAT THIS MATERIAL WILL BE HAULED OFF OF THE PROJECT AS WASTE. SOME OF THE MATERIAL MAY BE INCORPORATED INTO THE FORESLOPES WITH THE APPROVAL OF THE PROJECT ENGINEER. ITEM TO INCLUDE ALL COSTS FOR HAULING, PLACING, COMPACTING AND SHAPING OF ANY MATERIAL PLACED ON THE FORESLOPES. ANY MATERIAL HAULED OFF OF THE PROJECT SHALL NOT BE PLACED IN A FLOODWAY.
3	2312-8260051	GRANULAR SURFACING, ON ROAD, CLASS A CRUSHED STONE; TO BE PLACED FROM TOP OF FORESLOPE TO TOP OF FORESLOPE TO MATCH PROPOSED BRIDGE AFTER ALL GRADING HAS BEEN COMPLETED. SOME OF THIS QUANTITY IS TO BE PLACED IN THE DRIVEWAYS.
4	2401-6745625	REMOVAL OF EXISTING BRIDGE; SEE GENERAL NOTES ON SHEET C.02 AND TABULATION BLOCK ON SHEET C.03
5	2402-2723000	EXCAVATION, CLASS 23; INCLUDES EXCAVATION FOR BOTH ABUTMENTS. MATERIAL IS TO BE USED TO BUILD OUT THE FORESLOPES TO MATCH THE NEW BRIDGE. QUANTITY CALCULATED AFTER ALL CLASS 13 CHANNEL HAS BEEN REMOVED. ITEM TO INCLUDE ALL COSTS FOR PLACING, COMPACTING AND SHAPING OF THE MATERIAL USED ON THE FORESLOPES.
6	2403-0100010	STRUCTURAL CONCRETE (BRIDGE); CLASS C CONCRETE TO BE USED. CERTIFIED PLANT INSPECTION IS REQUIRED.
7	2404-7775005	REINFORCING STEEL, EPOXY COATED; ALL REINFORCING IS TO BE GRADE 60.
8	2414-6424110	CONCRETE BARRIER RAILING; CERTIFIED PLANT INSPECTION IS REQUIRED FOR THIS ITEM.
9	2417-1040042	CULVERT, C.M.P. ENTRANCE PIPE, 42 INCH DIAMETER; ALL C.M.P. SHALL BE RIVETED, 14 GAUGE WITH STANDARD CORRUGATIONS. NO HELICALLY CORRUGATED PIPE WILL BE ALLOWED. SEE SHEET D.01 FOR LOCATION AND C.03 FOR TABULATION BLOCK.

ESTIMATED REFERENCE INFORMATION		
Data listed is for informational purposes only and shall not constitute a basis for any extra work orders		
NO.	ITEM CODE	DESCRIPTION
10	2501-0201042	PILES, STEEL, HP 10x42; INCLUDES 5-20' FOR THE SOUTH ABUTMENT, 9- 35' FOR THE SOUTH PIER, 9-35' FOR THE NORTH PIER AND 5 - 20' FOR THE NORTH ABUTMENT. CAST STEEL PILE POINTS ARE REQUIRED FOR ALL PILING (28 total) IN ACCORDANCE WITH ARTICLE 4167.02 OF THE CURRENT STANDARD SPECIFICATIONS AND MATERIALS I.M. 467.02. PILE POINTS ARE TO BE INCLUDED IN THIS BID ITEM.
11	2501-5478042	CONCRETE ENCASEMENT OF STEEL H-PILES, HP10x42 (P10L, TYPE 3); THE FORMS USED TO ENCASE THE STEEL H-PILE SHALL BE SECURELY HELD IN PLACE ON BOTH THE TOP AND BOTTOM OF THE ENCASEMENT TO KEEP THEM CENTERED ON THE PILING. CERTIFIED PLANT INSPECTION IS REQUIRED FOR THIS ITEM.
12	2507-3250005	ENGINEERING FABRIC; TO BE PLACED UNDER ALL AREAS WHERE RIP-RAP IS PLACED ON THE SLOPES. QUANTITY INCLUDES MATERIAL FOR A MINIMUM 2' LAPAT ALL SPLICES. FABRIC SHALL BE HELD FIRMLY IN PLACE TO PREVENT MOVEMENT WHEN THE RIP-RAP IS PLACED. SEE SHEET D.01.
13	2507-6800061	REVTMENT, CLASS "E" RIP-RAP; CLASS "E" REVTMENT SHALL BE PLACED AT A UNIFORM THICKNESS OF 2' AFTER THE BERM AND STREAMBED HAVE BEEN UNDERCUT 3' TO ACCOMMODATE REVTMENT. REVTMENT IS TO START AT THE TOE OF SLOPE AND PLACED TO MEET THE FINAL TOP OF BERM ELEVATION. SEE SHEET D.01 FOR LOCATIONS.
14	2519-3280000	FENCE, FIELD; ANY FENCE LOCATED IN THE RIGHT OF WAY THAT WAS REMOVED SHALL BE REPLACED WITH 5 STRAND BARB WITH 10' POST SPACING. ITEM TO INCLUDE 2 - 16' CATTLE PANELS. SEE TYPICAL ON SHEET C.03.
15	2519-3300400	FIELD FENCE BRACE PANELS; TO BE INSTALLED NEXT TO THE BRIDGE, ON THE FENCE CORNERS AND WHERE THE NEW FENCE HOOKS INTO THE EXISTING FENCE.
16	2519-3300700	FENCE, TEMPORARY; THE CONTRACTOR IS TO WORK WITH THE ADJOINING LANDOWNER TO SEE IF ANY TEMPORARY FENCE WILL BE NEEDED. THE TEMPORARY FENCE WILL ONLY BE INSTALLED IF NEEDED IN ORDER FOR THE ADJOINING LANDOWNER TO PASTURE THEIR LIVESTOCK. THE TEMPORARY FENCE SHALL BE OF SUFFICENT CONSTRUCTION TO HOLD IN THE APPROPRIATE LIVESTOCK. THE CONTRACTOR SHALL MAINTAIN THE TEMPORARY FENCE UNTIL THE PERMANENT FENCE IS INSTALLED. ITEM SHALL INCLUDE THE REMOVAL OF THE TEMPORARY FENCE AFTER THE PERMANENT FENCE HAS BEEN INSTALLED AND ALL MATERIALS REMAINING THE PROPERTY OF THE CONTRACTOR. THE PROJECT ENGINEER WILL MEASURE THE LINEAL FEET OF TEMPORARY FENCE INSTALLED AND THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE FOR THE LINEAL FEET OF TEMPORARY FENCE INSTALLED.
17	2524-9100030	OBJECT MARKER, TYPE 3; OFFSET BRACKETS WILL NOT BE REQUIRED. THE OBJECT MARKERS ARE TO BE INSTALLED BEFORE THE ROAD IS OPENED TO TRAFFIC. ITEM TO INCLUDE ALL LABOR EQUIPMENT AND MATERIAL TO INSTALL THE OBJECT MARKERS. THE PROJECT ENGINEER WILL COUNT EACH OBJECT MARKER INSTALLED AND PAYMENT WILL BE MADE OFF OF THAT COUNT.
18	2528-2518000	SAFETY CLOSURE; SEE SHEET C.03 FOR TABULATION.
21	2599-9999009	DIRT AND ROCK DRILLING; ITEM TO BE USED IN ORDER TO GET THE PILE TIP ELEVATIONS AT LEAST 15' BELOW THE BOTTOM OF EAST ABUTMENT FOOTING AND 15' BELOW THE BOTTOM OF BOTH PIER ENCASEMENTS. HOLES SHALL BE A MINIMUM OF 20" DIAMETER. THE SPOILS MAY REMAIN IN THE HOLES AS LONG AS THEY WON'T INTERFER WITH DRIVING THE PILES. SOME OF THIS QUANTITY WILL JUST BE AUGERING THRU DIRT. SEE SHEET V.01 FOR APPROXIMATE ROCK ELEVATIONS. THE QUANTITIES OF DIRT/ROCK ARE BASED OFF OF THE SOIL BORINGS AND NOT GUARANTEED FOR CONSTRUCTION. NO EXTRA COMPENSATION WILL BE MADE IF ROCK IS ENCOUNTERED HIGHER THAN SHOWN ON SHEET V.01. THE PROJECT ENGINEER WILL MEASURE THE DEPTH OF EACH HOLE OR THE LENGTH OF AUGER IN THE GROUND AND PAYMENT FOR THIS ITEM WILL BE BASED OFF OF THOSE MEASUREMENTS.
22	2601-2634100	MULCHING, SEEDING AND FERTILIZING (RURAL) AND STABILIZING CROP, SEEDING AND FERTILIZING; ALL AREAS DISTURBED INSIDE THE RIGHT OF WAY TO BE SEEDED AND MULCHED AFTER CONSTRUCTION IS COMPLETED. ANY AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE RIGHT OF WAY SHALL BE RESEEDD BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
23	2601-2636043	
24	2601-2642100	
25	2602-0000020	SILT FENCE AND PERIMETER & SLOPE SEDIMENT CONTROL DEVICE, 12 INCH DIAMETER; TO BE INSTALLED AS NEEDED DURING THE COURSE OF THE PROJECT TO PREVENT ANY SILT FROM ENTERING THE STREAM OR LEAVING THE PROJECT.
26	2602-0000312	

100' 00" x 30' 00" C.C.S. Bridge

Located on St. Joes Prairie Road over Lytle Creek

ABUTMENTS; INTREGRAL PIERS; P10L, TYPE 3

END SPANS; 30'06" CENTER SPAN; 39'00"

ESTIMATED QUANTITIES

STATION; 36+02 SKEW; 0°

DUBUQUE COUNTY, IOWA FHWA#; 145701

GENERAL NOTES AND INFORMATION
DATA LISTED BELOW IS FOR INFORMATION PURPOSES ONLY AND SHALL NOT CONSTITUTE A BASIS FOR ANY EXTRA WORK ORDERS
EXISTING BRIDGE REMOVAL; THE EXISTING BRIDGE AT STA. 36+02 IS A 41'x20' STEEL I-BEAM BRIDGE WITH AN OPEN GRATE DECK AND FULL CONCRETE ABUTMENTS SHALL BE REMOVED ACCORDING TO SECTION 2401 OF THE STANDARD SPECIFICATIONS. ALL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE REMOVED FROM THE PROJECT.
CONTRACTOR IS TO USE DUE CAUTION IN WORKING OVER AND AROUND ALL TILE LINES. BREAKS IN ANY TILE LINE DUE TO THE CONTRACTOR'S CARELESSNESS ARE TO BE REPAIRED AT THE CONTRACTOR'S EXPENSE WITHOUT COST TO DUBUQUE COUNTY. ANY TILE LINE BROKEN OR DISTURBED BY THE CONTRACTOR WILL BE REPLACED AS DIRECTED BY THE PROJECT ENGINEER.
FINAL CLEANUP OF THE CONSTRUCTION AREA SHALL BE IN ACCORDANCE WITH SECTION 1104.08 OF THE I.D.O.T. STANDARD SPECIFICATIONS.
A PRE CONSTRUCTION CONFERENCE WITH THE SUCCESSFUL BIDDER WILL BE HELD NOT LESS THAN THREE WEEKS BEFORE STARTING THE PROJECT.
CONTRACTOR IS TO USE DUE CAUTION WHEN WORKING AROUND R.O.W. PINS AND SURVEY CONTROL POINTS WHICH ARE MARKED WITH AN OAK HUB AND CROSSING LATHE. ANY PINS DISTURBED BY THE CONTRACTOR WILL BE REPLACED AT THE CONTRACTORS EXPENSE.
CONTRACTOR IS TO FURNISH, ERECT AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL DEVICES ON A 24 HOUR PER DAY, 7 DAY A WEEK BASIS DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR IS TO PROVIDE A 24 HOUR CALL NUMBER FOR REPAIR OF DEFICIENCIES AFTER HOURS. CONSTRUCTION WILL BE SUSPENDED IN THE EVENT THAT ANY OF THE REQUIRED TRAFFIC CONTROL DEVICES ARE NOT LEGIBLE AND OPERATIONAL AND SHALL REMAIN SUSPENDED UNTIL SUCH DEFICIENCY IS CORRECTED.
NO TEMPORARY CONSTRUCTION EASEMENTS HAVE BEEN OBTAINED ON THIS PROJECT. CONTRACTOR IS TO RESPECT PRIVATE PROPERTY. DUBUQUE COUNTY WILL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO PRIVATE PROPERTY CAUSED BY THE CONTRACTOR. ANY DAMAGE TO PRIVATE PROPERTY CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE LANOWNER WITH NO COST TO DUBUQUE COUNTY.
THE ROAD WILL BE CLOSED IN THE AREA OF THE BRIDGE FOR ALL THRU TRAFFIC.
CONSTRUCTION STAKING TO BE DONE BY DUBUQUE COUNTY.
BRIDGE DECK SMOOTHNESS SHALL NOT APPLY TO THIS PROJECT.
CERTIFIED PLANT INSPECTION FOR ALL P.C.C. ITEMS WILL BE REQUIRED ON THIS PROJECT.

PAINT SCRAPE SAMPLE
PAINT SCRAPE SAMPLES OF THIS BRIDGE WERE TAKEN TO GET AN INDICATION OF THE EXISTENCE OF AND LEVEL OF TOTAL CHROMIUM AND TOTAL LEAD. THE ANALYSIS OF TOTAL CHROMIUM IN THE SAMPLE WAS 20.7 mg/kg. THE ANALYSIS OF TOTAL LEAD IN THE SAMPLE WAS 382,000 mg/kg. THE ANALYSIS SHOWS THE EXISTENCE OF THESE TWO TOXIC CONSTITUENTS. THE LEVELS INDICATED BY THESE TESTS COULD CREATE CONDITIONS ABOVE REGULATORY LIMITS FOR HEALTH SAFETY REQUIREMENTS. NO OTHER SUBSTANCES WERE ANALYZED. THE BIDDER SHALL NOT RELY ON THE LPA'S TESTING AND ANALYSIS FOR ANY PURPOSE OTHER THAN AN INDICATION OF THE EXISTENCE OF THESE TWO CONSTITUENTS.

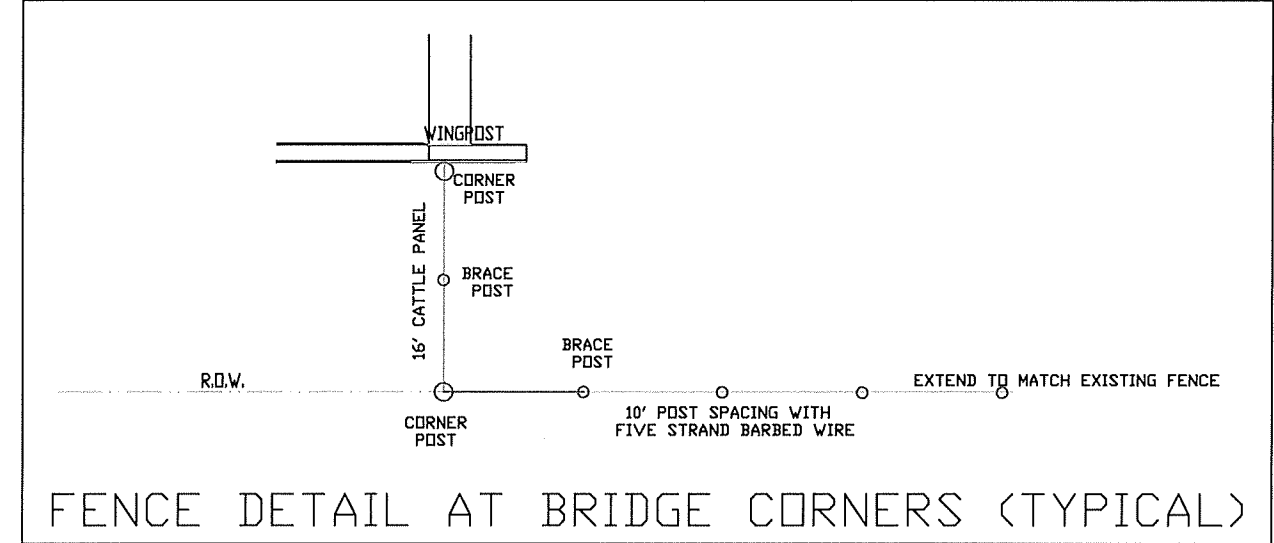
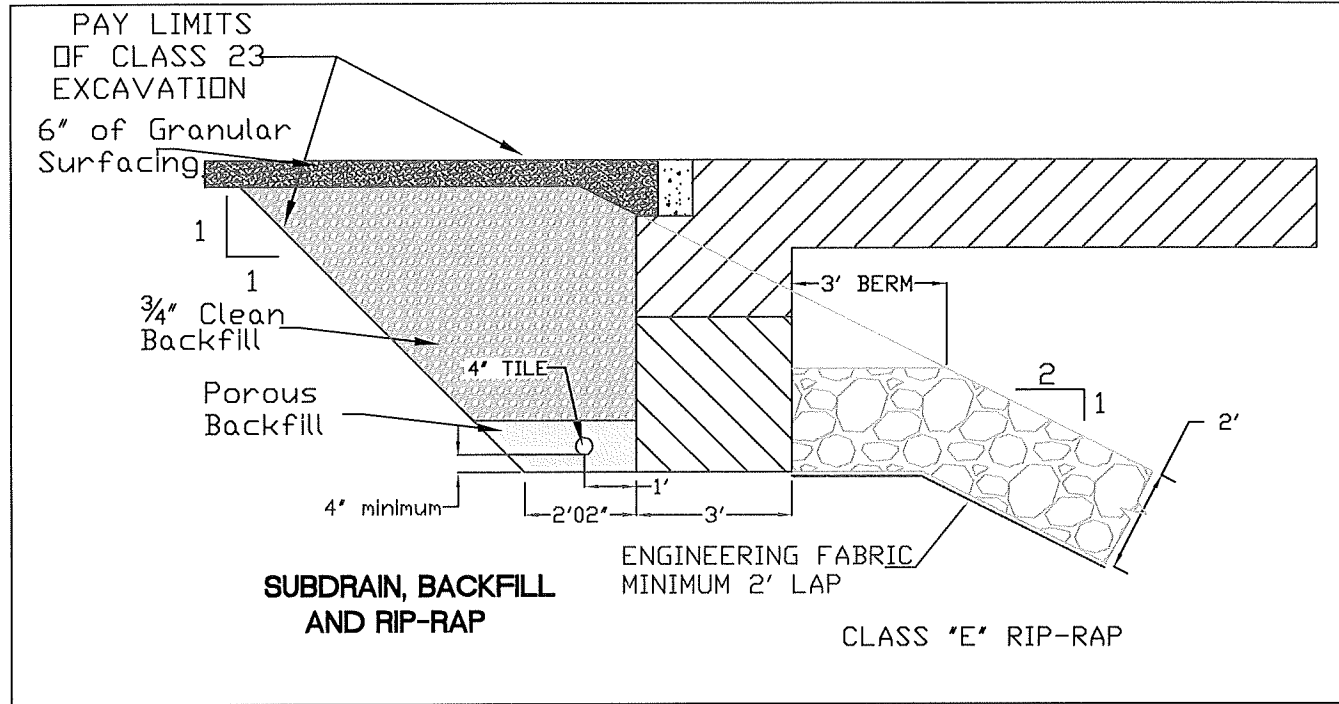
ASBESTOS INSPECTION
AN ASBESTOS INSPECTION WAS CONDUCTED ON FEBRUARY 4, 2026, BY CRAIG DAVIS. LICENSE NUMBER 25-13042. NO SUSPECTED ACM WAS FOUND. IF ANY SUSPECTED ACM IS UNCOVERED DURING THE DEMOLITION, THE CONTRACTOR IS TO INFORM THE PROJECT ENGINEER SO THE APPROPRIATE MEASURES CAN BE TAKEN TO MITIGATE IT.

STANDARD ROAD PLANS			
Number	Date	Sheets	Title
EC-201	04/20/21	6	SILT FENCE
EC-204	10/19/21	3	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICES
MI-103	10/20/15	7	DEER FENCE AND FIELD FENCE CONSTRUCTION
SI-173	04/19/16	2	OBJECT MARKERS
TC-252	10/20/26	4	ROUTES CLOSED TO TRAFFIC

PILE DESIGN NOTES: LRFD contract length resistance --E718 or E818
THE CONTRACT LENGTHS OF 20 FEET FOR THE ABUTMENT PILING IS BASED ON A COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 93 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.7 FOR ROCK END BEARING. STRUCTURAL RESISTANCE FACTOR-1.
THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.83 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE DESIGNED FOR ROCK END BEARING.
THE CONTRACT LENGTHS OF 35 FEET FOR THE PIER PILING IS BASED ON A COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 103 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.7 FOR ROCK END BEARING. STRUCTURAL RESISTANCE FACTOR -1.
THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.83 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE DESIGNED FOR ROCK END BEARING.
PILE DRIVING NOTE: LRFD driving and construction control--E719 or E819
THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR THE ABUTMENT PILES IS 65 TONS AT THE END OF DRIVE USING THE FORMULA LISTED BELOW. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL.
THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR THE PIER PILES IS 68 TONS AT THE END OF DRIVE USING THE FORMULA LISTED BELOW. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL.
THE FORMULA FOR GRAVITY HAMMERS TO USE TO DETERMINE PILE BEARING SHALL BE; $P=(3WH/S+0.35) \times (W/W+M)$ THE FORMULA FOR DIESEL HAMMERS TO USE TO DETERMINE PILE BEARING SHALL BE; $P=(3E/S+0.1) \times (W/W+M)$
WHERE; P = THE BEARING VALUE IN TONS W = THE WEIGHT OF THE GRAVITY HAMMER, OR THE RAM OF AN AIR HAMMER OR DIESEL HAMMER IN TONS. M = THE WEIGHT IN TONS OF THE PILE PLUS THE WEIGHT IN TONS OF THE CAP PLUS THE WEIGHT IN TONS OF THE ANVIL. E = THE ENERGY PER BLOW IN FOOT TONS(JOULES). S = THE AVERAGE PENETRATION IN INCHES OF THE PILE PER BLOW FOR THE LAST 5 BLOWS FOR GRAVITY HAMMERS AND THE LAST 10 BLOWS FOR DIESEL HAMMERS. (REFUSAL FOR A HP10x42 IS 72 TONS USING THE FORMULAS LISTED ABOVE.)

CERTIFIED PLANT INSPECTION
CERTIFIED PLANT INSPECTION SHALL APPLY TO ALL ITEMS INVOLVING CONCRETE ON THIS PROJECT.

100' 00" x 30' 00" C.C.S. Bridge
Located on St. Joes Prairie Road over Lytle Creek
ABUTMENTS; INTEGRAL PIERS; P10L,TYPE 3
END SPANS; 30'06" CENTER SPAN; 39'00"
GENERAL NOTES
STATION; 36+02 SKEW; 0°
DUBUQUE COUNTY, IOWA FHWA#; 145701



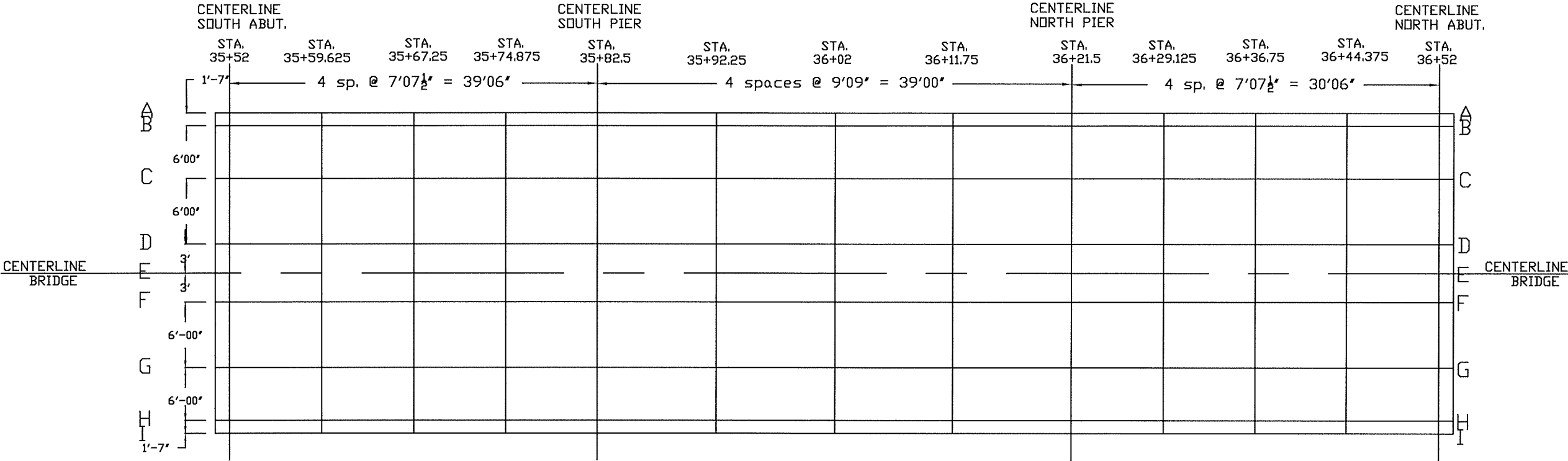
C.M.P. INFORMATION								
Inlet Station	Outlet Station	Side (Lt./Rt.)	Length (lf)	Size (inches)	Inlet Apron (Y/N)	Outlet Apron (Y/N)	Inlet Elevation	Outlet Elevation
34+54	35+64	Lt.	110	42	N	N	905.00	900.00

DIRT AND ROCK DRILLING				
Location	Number of Holes	Approx. l.f. of dirt (per hole)	Approx. l.f. rock (per hole)	Total (l.f.)
West Pier	9	7	8	135
East Pier	9	8	7	135
East Abutment	5	10	5	75
Total				345
REMARKS; DIRT/ROCK QUANTITIES ARE BASED OFF THE SOIL BORINGS AND NOT GUARANTEED FOR CONSTRUCTION. NO EXTRA COMPENSATION WILL BE MADE IF ROCK IS ENCOUNTERED HIGHER THAN SHOWN ON SHEET V.01.				

TABULATION OF SAFETY CLOSURES			
Refer to Section 2518 of the Standard Specifications			
STATION	CLOSURE TYPE		REMARKS
	ROAD QTY.	HAZARD QTY.	
34+00	1	-	South End of Project
35+00	-	1	South End of Bridge
37+00	-	1	North End of Bridge
38+00	1	-	North End of Project

REMOVAL OF EXISTING BRIDGE		
LOCATION	DESCRIPTION	DISPOSAL
STA. 36+02	41'x20' STEEL I-BEAM	CONTRACTOR
REMARKS; THE EXISTING STEEL I-BEAM BRIDGE WITH OPEN GRATE DECK AND FULL CONCRETE ABUTMENTS, SHALL BE REMOVED ACCORDING TO STANDARD SPECIFICATION 2401. ALL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT.		

100' 00" x 30' 00" C.C.S. Bridge
Located on St. Joes Prairie Road over Lytle Creek
ABUTMENTS; INTEGRAL PIERS; P10L, TYPE 3
30'06" END SPANS 39'00" CENTER SPAN
MISC. TABULATION BLOCKS
STATION; 36+02 SKEW; 0°
DUBUQUE COUNTY, IOWA FHWA#; 145701



TOP OF SLAB ELEVATIONS WITH NO CAMBER FIGURED																
WEST																
	S. End	S. Abut	1/4	1/2	3/4	S. Pier	1/3	1/2	2/3	N. Pier	1/4	1/2	3/4	N. Abut.	N. End	
A	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	A
B	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	B
C	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	C
D	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	D
E	909.00	909.00	909.00	909.00	909.00	909.00	909.00	909.00	909.00	909.00	909.00	909.00	909.00	909.00	909.00	E
F	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	908.97	F
G	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	908.85	G
H	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	H
I	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	908.73	I
EAST																

TOP OF SLAB ELEVATIONS WITH CAMBER FIGURED																
WEST																
	S. End	S. Abut	1/4	1/2	3/4	S. Pier	1/4	1/2	3/4	N. Pier	1/4	1/2	3/4	N. Abut.	N. End	
A	908.73	908.73	908.75	908.76	908.74	908.73	908.76	908.77	908.76	908.73	908.74	908.76	908.75	908.73	908.73	A
B	908.73	908.73	908.75	908.76	908.74	908.73	908.76	908.77	908.76	908.73	908.74	908.76	908.75	908.73	908.73	B
C	908.85	908.85	908.87	908.88	908.86	908.85	908.88	908.89	908.88	908.85	908.86	908.88	908.87	908.85	908.85	C
D	908.97	908.97	908.99	909.00	908.98	908.97	909.00	909.01	909.00	908.97	908.98	909.00	908.99	908.97	908.97	D
E	909.00	909.00	909.02	909.03	909.01	909.00	909.03	909.04	909.03	909.00	909.01	909.03	909.02	909.00	909.00	E
F	908.97	908.97	908.99	909.00	908.98	908.97	909.00	909.01	909.00	908.97	908.98	909.00	908.99	908.97	908.97	F
G	908.85	908.85	908.87	908.88	908.86	908.85	908.88	908.89	908.88	908.85	908.86	908.88	908.87	908.85	908.85	G
H	908.73	908.73	908.75	908.76	908.74	908.73	908.76	908.77	908.76	908.73	908.74	908.76	908.75	908.73	908.73	H
I	908.73	908.73	908.75	908.76	908.74	908.73	908.76	908.77	908.76	908.73	908.74	908.76	908.75	908.73	908.73	I
EAST																

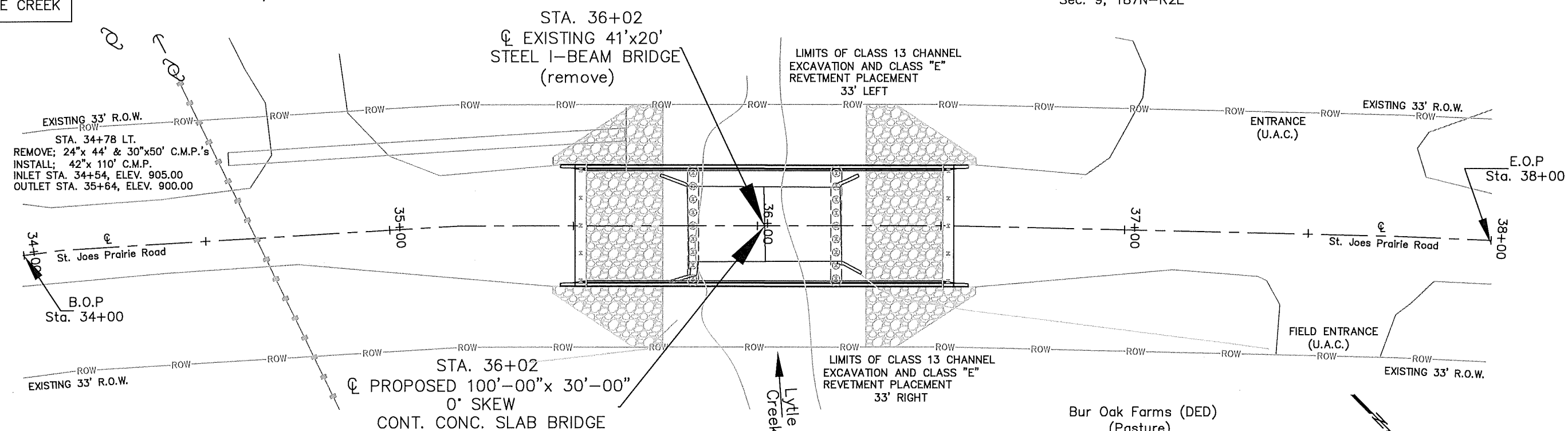
100' 00" x 30' 00" C.C.S. Bridge
Located on St. Joes Prairie Road over Lytle Creek
ABUTMENTS; INTEGRAL PIERS; P10L, TYPE 3
30'06" END SPANS 39'00" CENTER SPAN
DECK GRADES
STATION; 36+02 SKEW; 0°
DUBUQUE COUNTY, IOWA FHWA#; 145701

DUBUQUE COUNTY
T-87-N, R-2-E
SECTION 9
WASHINGTON TOWNSHIP
OVER LYTLE CREEK

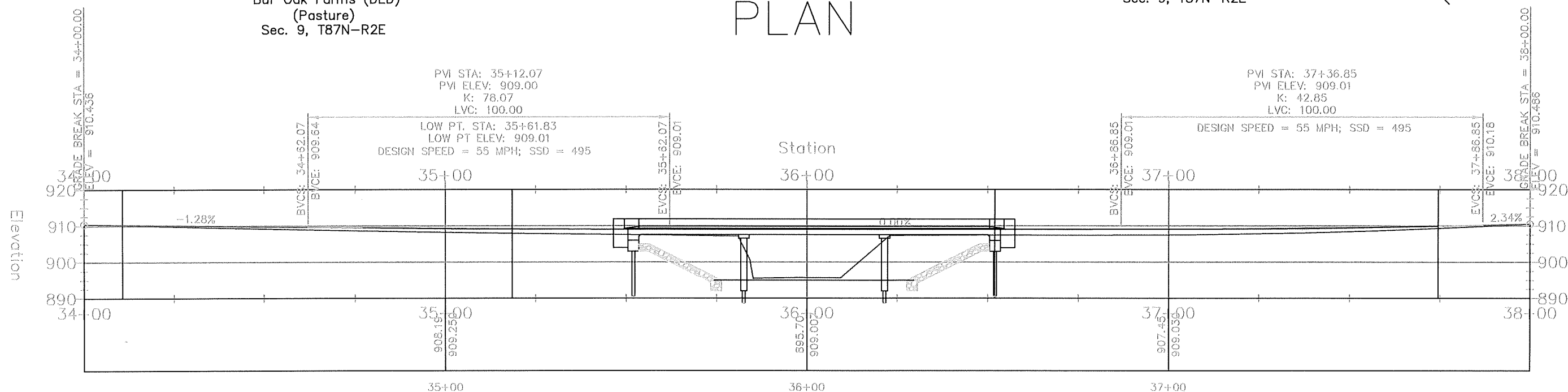
Bur Oak Farms (DED)
(Quarry)
Sec. 9, T87N—R2E

Bur Oak Farms (DED)
(Parking)
Sec. 9, T87N-R2E

BENCHMARK; SPIKE IN POWER POLE
STA. 34+48, 47' Left
ELEVATION = 912.00



PLAN



PROFILE

100' 00" x 30' 00" C.C.S. Bridge

Located on St. Joes Prairie Road over Lytle Creek

ABUTMENTS; INTEGRAL	PIERS; P10L, TYPE 3
30' 06" END SPANS	39'00" CENTER SPAN

PLAN AND PROFILE

STATION; 36+02 SKEW; 0°

DUBUQUE COUNTY, IOWA FHWA#: 145701

DUBUQUE COUNTY

PROJECT NO. BROS-C031(133)--5F-31

D.01

Dubuque County Bridge Replacements
various locations | various, IA
Terracon Project No. 13245093

Terracon
3105 Capital Way, Ste 5
Cedar Falls, IA

Boring Log No. STJ-1

Location: See Exploration Plan Latitude: 42.3628° Longitude: -90.7403°		Depth (Ft.)	Water Level Observations	Sample Type	Recovery (in.)	Field Test Results
Elevation.: 907.5 (Ft.)						
FILL - GRAVEL						
2.5		905				
IDOT - STIFF SANDY SILT FILL FILL - SANDY SILT, trace gravel, brown, moist						
7.0		900.5				
IDOT - SOFT SILTY CLAY LEAN CLAY (CL), with silt, trace sand, brown gray, moist to wet						
12.0		895.5				
IDOT - FIRM SILTY GLACIAL CLAY CLAYEY SILT (ML), with limestone gravel, brown, wet						
20.0		887.5				
LIMESTONE, highly weathered and broken, with clay layers, brown to light brown						
22.6		884.9				
Sampler Refusal at 22.6 Feet						

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
19' observed while sampling
10' observed after drilling

Cave-in at 20' after drilling

Advancement Method
Hollow Stem Auger

Abandonment Method
Boring backfilled with soil cuttings upon completion.

Drill Rig

Automatic

Driller

CL

Boring Started

11-11-2024

Boring Completed

11-11-2024

Facilities | Environmental | Geotechnical | Materials

Dubuque County Bridge Replacements
various locations | various, IA
Terracon Project No. 13245093

Terracon
3105 Capital Way, Ste 5
Cedar Falls, IA

Boring Log No. STJ-2

Location: See Exploration Plan Latitude: 42.3628° Longitude: -90.7403°		Depth (Ft.)	Water Level Observations	Sample Type	Recovery (in.)	Field Test Results
Elevation.: 907.5 (Ft.)						
FILL - GRAVEL						
2.0		905.5				
IDOT - STIFF SANDY SILT FILL FILL - SANDY SILT, trace gravel, brown, moist						
6.0		901.5				
IDOT - SOFT SILTY CLAY FILL FILL - LEAN CLAY, trace sand and organics, dark brown, moist to wet						
13.5		894				
IDOT - SOFT SILTY CLAY LEAN CLAY (CL), with silt and limestone gravel, brown and gray, wet						
17.0		890.5				
IDOT - FIRM-VERY FIRM GLACIAL CLAY SANDY LEAN CLAY (CL), with silt and limestone gravel, brown, wet						
21.5		886				
LIMESTONE, highly weathered and broken, with clay layers, light brown						
26.3		881.2				
Sampler Refusal at 26.3 Feet						

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
14' observed while sampling
10' observed after drilling

Cave-in at 15' after drilling

Advancement Method
Hollow Stem Auger

Abandonment Method
Boring backfilled with soil cuttings upon completion.

Drill Rig

Automatic

Driller

CL

Boring Started

11-11-2024

Boring Completed

11-11-2024

Facilities | Environmental | Geotechnical | Materials

100' 00" x 30' 00" C.C.S. Bridge
Located on St. Joes Prairie Road over Lytle Creek
ABUTMENTS; INTEGRAL PIERS; P10L, TYPE 3
30'06" END SPANS 39'00" CENTER SPAN
BORING LOGS
STATION; 36+02 SKEW; 0°
DUBUQUE COUNTY, IOWA FHWA#; 145701

Dubuque County Bridge Replacements
various locations | various, IA
Terracon Project No. 13245093

Terracon
3105 Capital Way, Ste 5
Cedar Falls, IA

Boring Log No. STJ-3

Graphic Log	Location: See Exploration Plan Latitude: 42.3629° Longitude: -90.7405°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results
	Elevation.: 907.5 (Ft.)					
	FILL - GRAVEL					
	3.0 IDOT - STIFF SILTY CLAY FILL FILL - LEAN CLAY , with silt, trace sand and gravel, dark brown and brown, moist	904.5			8	3-3-3 N=6
	7.0 IDOT - SOFT SILTY CLAY FILL FILL - LEAN CLAY , with silt, trace sand and gravel, dark brown and brown, moist	900.5				
	12.0 IDOT - STIFF SILTY CLAY LEAN CLAY (CL) , with limestone gravel, gray, wet	895.5			11	3-1-2 N=3
	16.0 IDOT - SOFT SILTY CLAY LEAN CLAY (CL) , with limestone gravel, gray, wet	891.5			5	3-2-8 N=10 2500 (HP)
	23.5 LIMESTONE , highly weathered and broken, light brown	884			0	2-2-2 N=4
	29.5 Auger Refusal at 29.5 Feet	878			0	100/2"

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
15.5' observed while drilling
12' observed after drilling

Cave-in at 25' after drilling

Advancement Method
Hollow Stem Auger

Abandonment Method
Boring backfilled with soil cuttings upon completion.

Drill Rig
589
Hammer Type
Automatic
Driller
CL

Boring Started
11-11-2024
Boring Completed
11-11-2024

Facilities | Environmental | **Geotechnical** | Materials

Dubuque County Bridge Replacements
various locations | various, IA
Terracon Project No. 13245093

Terracon
3105 Capital Way, Ste 5
Cedar Falls, IA

Boring Log No. STJ-4

Graphic Log	Location: See Exploration Plan Latitude: 42.3630° Longitude: -90.7405°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results
	Elevation.: 907.5 (Ft.)					
	FILL - GRAVEL					
	1.5 IDOT - CLAYEY SAND FILL FILL - SAND AND GRAVEL , gray and brown, moist	906				
	5.0 IDOT - STIFF SANDY CLAY FILL FILL - LEAN CLAY , with sand and gravel, dark brown and brown, moist to wet	902.5			13	13-12-5 N=17
	10.0				15	2-2-2 N=4
	15.0 LIMESTONE , highly weathered and broken, with clay layers, light brown	892.5			5	3-4-4 N=8
	20.0				17	4-9-17 N=26
	25.5 Auger Refusal at 25.5 Feet	882			0	100/0"

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
15' observed while sampling
10' observed after drilling

Cave-in at 15' after drilling

Advancement Method
Hollow Stem Auger

Abandonment Method
Boring backfilled with soil cuttings upon completion.

Drill Rig
589
Hammer Type
Automatic
Driller
CL

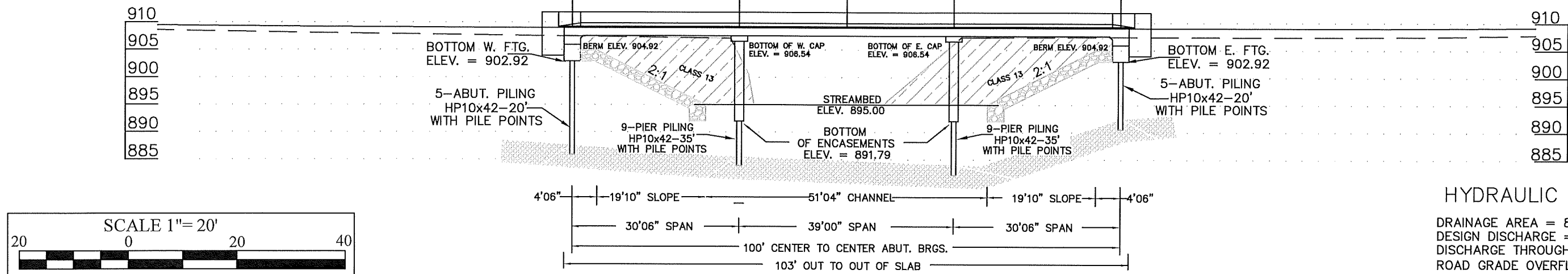
Boring Started
11-11-2024
Boring Completed
11-11-2024

Facilities | Environmental | **Geotechnical** | Materials

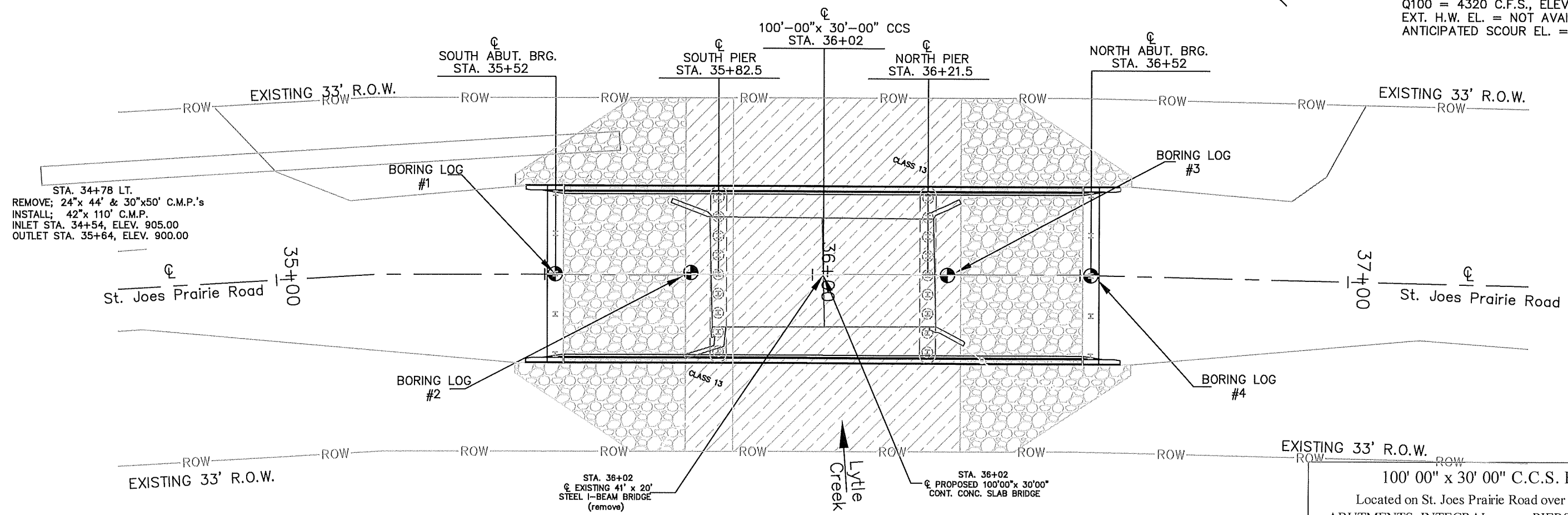
100' 00" x 30' 00" C.C.S. Bridge
Located on St. Joes Prairie Road over Lytle Creek
ABUTMENTS; INTEGRAL PIERS; P10L, TYPE 3
30'06" END SPANS 39'00" CENTER SPAN
BORING LOGS
STATION; 36+02 SKEW; 0°
DUBUQUE COUNTY, IOWA FHWA#; 145701

DUBUQUE COUNTY
T-87-N, R-2-E
SECTION 9
WASHINGTON TOWNSHIP
OVER LYTLE CREEK

BENCH MARK: SPIKE IN POWER POLE
STA. 34+48, 47' Left
ELEVATION = 912.00



CENTERLINE SECTION



SITUATION PLAN

100' 00" x 30' 00" C.C.S. Bridge
Located on St. Joes Prairie Road over Lytle Creek
ABUTMENTS; INTEGRAL PIER; P10L, TYPE 3
30' 06" END SPANS 39'00" CENTER SPAN
SITUATION PLAN
STATION; 36+02 SKEW; 0°
DUBUQUE COUNTY, IOWA FHWA#; 145701