RESOLUTION OF FINAL PLAN SUBMITTAL FOR PROJECT NUMBER BRS-SWAP-C050(124)—FF-50

Moved by, Ialoma seconded by, Cupples
To sign and approve Final Plans for an April 21, 2020 D.O.T Letting on project BRS-SWAP-
C050(124)—FF-50, Pretensioned Prestressed Concrete Beam Bridge on County Road F24 over
Indian Creek laying between Sections 34-81N-21W in Clear Creek Township and Section 3-80N-
21W in Poweshiek Township, Jasper County, Iowa.
AYES: Carpenter Cupples Talsons
NAYS:
Approved this7th day ofJanuary, 2020.
Dennis Carpenter Chairman Board of Supervisors Brandon Talsma Board of Supervisors
Doug Cupples Board of Supervisors
ATTEST: Dennis Parrott Jasper County Auditor

2 5°

117

SIST AVE W

F24 AVE W \$52

22 N 19TH AVE W

35TH

STA 2+00

-EOP STA. 13+00

STA. 13+32.15 ¢ EXISTING 206' X 26.2' PPCB BRIDGE W/ WOOD PILING @ ABUTMENT & CONCRETE PILING @ PIERS REPLACE WITH 243-0" X 30'6" PPCB BRIDGE

122ND ST H ST N ST H ST N ST H

JASPER COUNTY

PROJECT LOCATION

SCALE IN MILES

BRIDGE REPLACEMENT

SECTION 404 PERMIT AND CONDITIONS 10.18.16 construct his project according to the requirements of U.S. Army orps of Engineses ANTONNIADE PERBAIT 14 CERMAR D.D.P. 22(1) 9.45(9) ermit No. CEMMR-DD-P.2019-045(9) A copy of this permit is available on the lova DDT website (http://www.renpermits.lowadot.gov). The U.S. rmy Corps of Engineers reserves the right to vasit the site without prior

rinis project is covered by Iowa DNR Floodplain Construction Permit No insert Iowa DNR permit

THE CONTRACTOR IS REQUIRED TO CONTACT "ONE CALL" AT (800) 292-8989 TO OBTAIN LOCATIONS FOR ALL EXISTING UTILITIES. REFER TO THE PROPOSAL FORM FOR LIST OF APPLICABLE SPECIFICATIONS

WORKING DRAWINGS AND FALSEWORK PLANS AND CALCULATIONS SHALL BE CERTIFED BY A PROFESSIONAL ENGUNEER REGISTERED IN THE STATE OF FOWN, FALSEWORK PLANS SHALL INCLUDE AN ESTIMATE FOR SETTLEMENT OF FORMS, PLANS, DRAWINGS AND CALCULATIONS ARE TO BE SENT TO JASPER COUNTY ENGINEER 91 MORTH HITH AND EAST

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INDEX OF SH

DESCRIPTION

ONGITUDINAL SECTION.

DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

PLANS OF PROPOSED IMPROVEMENT ON THE

FARM TO MARKET SYSTEM JASPER COUN BRS-SWAP-CO50(124)--FF-51

BGN. STA.

END STA. 13+00

1100

0 208

MILEAGE SUMMARY

BRIDGE REPLACEMENT - PPCB

ON COUNTY ROAD F24, OVER NORTH INDIAN CREEK APPROX 500 FEET EAST OF STATE HWY 117 FHWA NO. 198460

THE FOLLOWING STANDARD PLANS SHALL BE CONSIDERED APPLICABLE TO CONSTRUCTION WORK ON THIS PROJECT

STANDARD BRIDGE PLANS

JASPER COUNTY BOARD OF SUPERVISORS



HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AMA A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

RUSSELL A. STUTT, P.E. 18165 MY LICENSE RENEWAL DATE IS DEC. 31, 2020 SHEETS COVERED BY THIS SEAL: (ENTIRE SUBMISSION UNLESS SPECIFIED HERE)

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3A-200	04-19-16	EW-401	10-20-15	
3A-201	04-18-17	LS-625	04-19-16	
3A-202	10-20-15	LS-630	10-18-16	
3R-101	04-21-15	PV-101	10-16-18	
3R-102	10-17-17	SI-173	04-19-16	
C-201	10-16-18	SI-211	10-18-16	

					10-20-15	W-301
			04-19-16	TC-252	04-18-17	C-204
			10-18-16	SI-211	10-16-18	C-201
			04-19-16	SI-173	10-17-17	R-102
	-		10-16-18	PV-101	04-21-15	R-101
	-		10-18-16	LS-630	10-20-15	A-202
	-		04-19-16	LS-625	04-18-17	A-201
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UTIL	UTILITY CONTACT INFORMATION	CT INFORI	MATION
PANY NAME	CONTACT PERSON	PHONE	CONTACTEMAII
sociation	Heather Loshaw	641-792-7011	lmorgan@ciaea.com
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	Craig Ranfeld	515-252-6632	MECDSMDesignLocates@midamorican.com
ations	l ocate Desk	800-289-1901	DONTE DECK SIMPOSTOR
		000-200-1001	LOCA C.DEGA(WINDS INCAM, COM

JASPER COUNTY

2014 AADT 390 V.P.D

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CLEARING AND GRUBBING EXCAVATION, CLASS 10 ROADWAY AND BORROW EXCAVATION, CLASS 10 CHANNEL SURFACING, DRIVEWAY, CLASS A CRUSHED STONE EXCAVATION, CLASS 10 CANCERTE	L	15	EACH	STRUCTURAL STEEL	2408-7800000	13
CLEARING AND GRUBBING EXCAVATION CLASS 10 ROADWAY AND BORROW EXCAVATION CLASS 10 CHANNEL EXCAVATION CLASS 20 CRUSHED STONE EXCAVATION CLASS 20 EXCAVATION CLAS	Ĺ	100,949	EB.	BEAMS PRETENSIONED PRESTRESSED CONCRETE Can	2407-0551380	12
ESTIMATED PROJECT QUANTITIES UNIT CRAINING AND GRUBBING EXCAVATION, CLASS 10 FROADWAY AND BORROW EXCAVATION, CLASS 10, CHANNEL EXCAVATION, CLASS 10, CHANNEL EXCAVATION, CLASS 10, CHANNEL EXCAVATION, CLASS 10, CHANNEL EXCAVATION, CLASS 20 EXTA SUBFRACING, DENIVEWAY, CLASS A CRUSHED STONE EXCAVATION, CLASS 20 EXCAVATION, EXCAVATION, CLASS 20 E		432.2	CY	REINFORCING STEEL EPOXY COATED	2404-7775005	1
ESTIMATED PROJECT QUANTITIES UNIT CLEARING AND GRUBBING EXCAVATION, CLASS 10 ROADWAY AND BORROW EXCAVATION, CLASS 10, CHANNEL EXCAVATION, CLASS ACRUSHED STONE EXCAVATION, CLASS ACRUS		122	CY	STRUCTURAL CONCRETE (BRIDGE)	2403-0100010	10
ESTIMATED PROJECT QUANTITIES LITEM JOI CLEARING AND GRUBBING JOI CLEARING AND GRUBBING ACRE 22/10070 EXCAVATION, CLASS 10 ROADWAY AND BORROW CY 12/10020 EXCAVATION, CLASS 10, CHANNEL CY CY L7425020 GRANULAR SHOULDERS, TYPE B 10690210 BRIDGE APPROACH, TWO LANE SY 1089275025 BRIDGE APPROACH, TWO LANE 1081275025 SURFACING, DRIVEWAY, CLASS ACRUSHED STONE 1081275025 TO TON 1081275025 TO T		1	EACH	EXCAVATION CLASS 20	2402-2720000	9
ESTIMATED PROJECT QUANTITIES VE CLEARING AND GRUBBING TEM CAPACITOR CLASS 10 ROADWAY AND BORROW CY CY CY CAPACITOR CHANGE TREATMENT CONTROL SURFACE TREATMENT SURFACE TREATMENT STACKS OF CONTROL SURFACE TREATMENT SURFACE TREATMENT STACKS OF CONTROL SURFACE TREATMENT SURFACE TREATMENT STACKS OF CONTROL SURFACE TREATMENT SURFACE TREATME		120	ION	REMOVAL OF EXISTING BRIDGE	2401-6745625	ω
ESTIMATED PROJECT QUANTITIES VE LEARING AND GRUBBING TEM ACRE 1-27/10070 EXCANATION, CLASS 10 ROADWAY AND BORROW CY 1-27/10200 EXCANATION, CLASS 10, CHANNEL 1-74/25020 GRANULAR SHOULDERS, TYPE B 1-74/25020 BRIDGE APPROACH, TWO LANE		7.5	SIA	SURFACING DRIVEWAY CLASS A CRUSHED STONE	2315-8275025	7
ESTIMATED PROJECT QUANTITIES VIII CLEARING AND GRUBBING 22/10070 EXCAVATION, CLASS 10 ROADWAY AND BORROW CY 1-74/25/2000 EXCAVATION, CLASS 10, CHANNEL 1-74/25/2000 EXCAVATION, CLASS 10, CHANNEL 1-74/25/2000 EXCAVATION CLASS 10, CHANNEL 1		2145.67	SY	DUST CONTROL SURFACE TREATMENT	2314-8257000	6
ESTIMATED PROJECT QUANTITIES VE CLEARING AND GRUBBING JOT CLEARING AND GR	L	496	ION	BRIDGE APPROACH. TWO LANE	2301-0690210	5
ESTIMATED PROJECT QUANTITIES UNIT Q 22/10070 EXCAVATION, CLASS 10, CHANNEL 127/10020 EXCAVATION, CLASS 10, CHANNEL		267	1	GRANULAR SHOULDERS, TYPE B	2121-7425020	4
ESTIMATED PROJECT QUANTITIES TEM UNIT Q ACRE 22/10070 EXCAVATION, CLASS 10 ROADWAY AND BORROW ACRE ACR	L	4554.81	12	EXCAVATION, CLASS 10, CHANNEL	2104-2710020	ω
TE ESTIMATED PROJECT QUANTITIES UNIT CLEARING AND GRUBBING TEM	1		ACRE	EXCAVATION, CLASS 10 ROADWAY AND BORROW	2102-2710070	2
ESTIMATED PROJECT QUANTITIES		QUANTI	CNI		216 001	_
ESTIMATED PROJECT OHANTITIES				ITEM SOCIAL LICO		NO
				ESTIMATED PROJECT QUANTITIES		

BID ITEM NOTES

- ANY LIVING, DEAD, CUT OR FALLEN MATERIAL OF THE ASH (FRAXINUS SPP.) INCLUDING TREES, NURSERY STOCK, LOGS, FRREWOOD, STUMPS, ROOTS, BRANCHES, AND COMPOSTED OR UNCOMPOSTED ASH CHIPS CAN BE FREELY MOVED WITHIN THE YELLOW AREAS OF THE MOST RECENT FEDERAL EAB QUARANTINE & AUTHORIZED TRANSIT HITPS://MWWA.PHIS.USDA, GOVIPLANT, ITEALTHIPLANT, PEST, INFOIEMERALD, ASH BIDOWNLOADS/EAB, QUARANTINE, MAP.PDF OBTAIN APPROPRIATE COMPLIANCE AGREEMENTS FROM USDA APHIS POR PRIOR TO MOVING ANY OF THE ABOVE LISTED ASH ARTICLES TO AREAS OUTSIDE THE YELLOW ZONE ON THE MAP. FOR QUESTIONS, CONCERNS, AND GENERAL ASSISTANCE. CONTACT. USDA APHIS PPQ, IOWA OFFICE, 515-414-2295 OR IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP THE CONTRACTING AUTHORITY HAS CUT DOWN TREES GREATER THAN 9" IN DIAMETER DUE TO THE POTENTIAL FOR THESE TREES BEING INHABITATED BY THE INDIAMA BAT (MYOTIS SODALIS). THE CONTRACTOR WILL BE REQUIRED TO REMOVE THE DOWN TREES, GRUB THE STUMPS AND CLEAR AND GRUB THE REMAINING TREES.
- TYPE "A" COMPACTION REQUIRED. QUANTITY DOES NOT COMPENSATE FOR SHRINKAGE. AFTER ALL AVAILABLE MATERIAL ON SITE HAS BEEN DEPLETED. THE CONTRACTOR SHALL FURNISH ALL REMAINING REQUIRED.

 NO PAYMENT FOR OVERHAUL SHALL BE MADE ON THIS PROJECT.

515-725-1470 ENTOMOLOGY@IOWAAGRICULTURE.GOV

- INCLUDES COSTS TO EXCAVATE CHANNEL AND SHAPE TO EXTENTS SHOWN ON LONGITUDINAL SECTION ALONG CENTERLINE OF ROADWAY AND THE LIMITS SHOWN ON THE SITUATION PLAN. SUITABLE MATERIAL MAY BE USED TO CONSTRUCT ABUTMENT BERMS, GUARDRAIL BLISTERS OR BE WASTED ON APPROACH ROADWAY FORESLOPES AS DIRECTED BY THE
- SEE TYPICAL SECTION AND TABULATION SHEET 9
- SEE TABULATION SHEET 9 AND STANDARD ROAD PLANS BR-102 COARSE AGGREGATE DURABILITY SHALL BE CLASS 3 OR BETTER, CERTIFIED PLANT INSPECTION IS REQUIRED.
- CONTRACTOR TO PROVIDE DUST CONTROL ON WEST 108TH STREET NORTH FROM F24 SOUTH TO HWY 117 CONTRACTOR TO MAINTAIN DUST CONTROL THROUGH THE COMPLETION OF THE PROJECT METHOD OF MEASUREMENT AND BASIS OF PAYMENT WILL BE ON STATIONS OF APPLICATION.
- SEE SITUATION PLAN SHEET 4 FOR LOCATION OF RELOCATE ENTRANCES. GRANULAR MATERIAL TO BE PLACED AT A

JASPER COUNTY

PROJECT NUMBER: BRS-SWAP-CO50(124)--FF-50

REMOVE EXISTING 206×26.2 * PPCB BRIDGE W / WOOD PILING @ ABUTMENTS & CONCRETE PI BE REMOVED FROM SITE BY CONTRACTOR AND BECOME PROPERTY OF CONTRACTOR SCRAPE SAMPLES WERE TAKEN OF THIS BRIDGE TO GET AN INDICATION OF THE EXISTENCE OF TOTAL CHROMIUM AND TOTAL LEAD THE ANALYSIS OF TOTAL CHROMIUM IN THE SAMPLE WAS 307 MORKS, THE ANALYSIS OF TOTAL LEAD IN THE SAMPLE WAS 35.400 MORKS. THE TWO TOXIC CONSTITUENTS THE LEXEL NIDICATED BY THESE TESTS COLLD CREATE CONDITIONS ABOVE REGULATORY LIMITS FOR HEALTH SAFETY REQUIREMENTS. NO OTHER SUBSTANCES WERE ANALYZED THE BIDDER SHOULD NOT RELY ON THE CONTRACTING AUTHORITIES TESTING FOR ANY PURPOSE OTHER THAN THE INDICATION OF THE EXISTENCE OF THESE TWO CONSTITUENTS. ALL MATERIAL TO

CLASS 20 EXCAVATION MAY BE USED TO CONSTRUCT THE ABUTMENT BERM, OR BE WASTED ON THE APPROACH ROADWAY FORESLOPES, SUITABLE SOILS SHALL BE AS DEFINED BY ARTICLE 2102 02.D.2 OF THE STANDARD SPECIFICATIONS UNSUITABLE SOIL SHALL BE WASTED OFF SITE.

ALL STRUCTURAL CONCRETE IS CLASS "C" CERTIFIED PLANT INSPECTION IS REQUIRED AND IS INCLUDED IN THIS ITEM. INCLUDES FURNISHING AND PLACING SUBDRAIN (INCLUDING EXCAVATION), GRANULAR BACKFILL, POROUS BACKFILL, AND SUBDRAIN OUTLETS AT ABUTMENTS. INCLUDES ALL PREFORMED EXPANSION JOINT FILLER REQUIRED. NO ADDITIONAL PAYMENT FOR HEATING AND PROTECTION OF CONCRETE WILL BE ALLOWED, IF

ALL REINFORCING STEEL SHALL BE GRADE 60

INCLUDES COST OF ALL BEARING MATERIAL FOR EAST EXPANSION PIER, WEST FIXED PIER AND BOTH ABUTMENTS, COIL TIES AND COIL RODS. SEE PIER BEARING DETAILS ON SHEET H30-44-06. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE STABILITY OF THE PRESTRESSED CONCRETTE BEAMS DURING ERECTION AND CONTRACTON UP THROUGH THE CONCRETTE BEADED EDCK REACHING ITS PULL 28 DAY STRENGTH. THE CONCRETE BEADED EDCK REACHING ITS PULL 28 DAY STRENGTH. THE BRACKING AS NEEDED TO ENSURE STABILITY. TEMPORARY ANCHOR BRACKING AT BEAM ENDS AND INTERNIEDIATE BRACKING AS NEEDED TO ENSURE STABILITY. TEMPORARY BRACKING SHALL NOT BE WELDED TO PRESTRESSED BEAM

INCLUDES WEIGHT OF DIAPHRAGMS SEE STANDARD SHEET H30-38-06

ALL STRUCTURAL CONCRETE FOR THE RAIL IS CLASS "C". CERTIFIED PLANT INSPECTION IS REQUIRED AND IS INCLUDED IN THIS ITEM. NO ADDITIONAL PAYMENT FOR HEATING AND PROTECTION OF CONCRETE WILL BE ALLOWED, IF NECESSARY.

CONNECTION BANDS SHALL BE 24" WIDE. ALL PIPE SHALL BE STANDARD CORRUGATIONS, NO HELICALLY CORRUGATED PIPE WILL BE ALLOWED. ALL

EACH ABUTMENT 9 HP10X57X70, EACH PIER FOOTING 11 HP10X57X45, SEE PILE NOTES ON SHEET 5. PILE POINTS SHALL NOT BE USED

SEE TABULATION SHEET 9 AND STANDARD ROAD PLANS

EXTENTS SHOWN ON SHEET 4

23 24 25 EXTENTS SHOWN ON SHEET 4. REVETMENT TO BE PLACED AT A THICKNESS OF 1'-6"

SEE TABULATION SHEET 9. EXISTING PAVEMENT CONSISTS OF 12" PCC WITH A 2" HMA OVERLAY. IN ORDER TO AVOID ANY UNINECESSARY SURFACE BREAKS OR PREMATURE SPALLING, THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE WHEN PERFORMING ANY OF THE NECESSARY SAW CUTTING OPERATIONS FOR THE PROPOSED PAVEMENT REMOVAL. SAVI. CUTS ARE TO BE MADE AT THE STATION INDICATED OR AT THE NEAREST TRANSVERSE

SEE TABULATION SHEET 9

26 27

THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING AN INDEPENDENT CHECK OF ALL CONSTRUCTION STAKES PLACED FOR THE PROJECT. THIS INDEPENDENT CHECK SHALL BE SUFFICIENT TO UNDERSTANDING THE PLACEMENT AND INTENT OF THE STAKES. THE CONTRACTING AUTHORITY WILL PROVIDE FIELD TIES TO THE SITE SURVEY AT THE

30-32 28 CONTRACTING AUTHORITY TO PROVIDE ALL DETOUR ROUTE SIGNAGE. ROAD WILL BE CLOSED TO TRAFFIC DURING CONSTRUCTION SEE SHEET 9 FOR DETAILS.

THE CONTRACTOR IS TO RESHAPE, FERTILIZE. SEED AND MULCH ANY AREAS DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION THIS SHALL BE INCLUDED IN THE PRICES FOR "SEEDING AND FERTILIZING (RURAL)

33-36 SEE TABULATION SHEET 9 AND STANDARD ROAD PLANS

DESIGN FOR 0° SKEW

INTEGRAL ABUTMENTS PRESTRESSED CONCRETE BEAM BRIDGE 243'-0" x 30'-6" PRETENSIONED

81'-0" END SPANS QUANTITIES 81'-0" INTERIOR SPAN

STA. 6+80.98 HWY F24W OVER INDIAN CREEK DECEMBER 2019

JASPER COUNTY

IOWA DEPARTMENT OF TRANSPORTATION-HIGHWAY DIVISION

SHEET 2 OF 14

SPECIFICATIONS

SPECIFICATIONS

DESIGN ASSPT

"CONSTRUCT"

OWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONS.

OW SERIES 2012, PLUS GENERAL SUPPLEMENTAL SPECIFICATIONS, AND APPLICABLE SUPPLEMENTAL SPECIFICATIONS, AND APPLICABLE SUPPLEMENTAL SPECIFICATIONS. AND APPLICABLE THE CONSTRUCTION ON THIS PROJECT

DESIGN STRESSES

DESIGN STRESSES FOR THE FOLLOWING MATERIALS ARE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, STHE EDITION, WITH INTERINS THROUGH 2013

REINFORCING STEEL IN ACCORDANCE WITH LRFD AASHTO SECTION 5. GRADE 50

STRUCTURAL STEEL IN ACCORDANCE WITH LRFD AASHTO SECTION 6. ASTM A709 GRADE 36 (AASHTO MZ70 GRADE

CONCRETE IN ACCORDANCE WI∓H LRFD AASHTO SECTION 5, F.C=4,000 PSI EXCEPT PRESTRESSED BEAM CONCRETE

PRESTRESSING STEEL SEE SHEETS H24-32-06 PRESTRESSED CONCRETE SEE SHEETS H24-32-06

GENERAL NOTES
THIS DESIGN IS FOR A 243-0" x 30-6" PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE ON HWY, F24 WEST OVER INDIAN CREEK IN JASPER COUNTY, LOWA. THIS BRIDGE IS DESIGNED FOR HL-93 LOADING PLUS 20 LBS. PER SQ. FT. OF ROADWAY FOR FUTURE WEARING

ACCESS SHALL BE MANTAINED TO INDIVIDUAL PROPERTIES DURING CONSTRUCTION THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE FROJECT TO THE PRIME CONTROL THE PRIME CONTROL THE PRIME CONTROL TO SHALL EMPLOY CONTROLS TO REDUCE. THE EROSIVENESS OF LAND ADJACENT TO SURFACE WATERS AND WETLANDS, INCLUDING ESTABLISHMENT AND MAINTENANCE OF EROSION CONTROL DURING AND ATTER CONSTRUCTION AND REVEGETATION OF ALL DESTURBED PREASS UPON PROJUCT COMPLETION THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ALL EROSION CONTROL MEASURES

STANDARD ROAD PLANS ARE AVAILABLE FROM THE IOWA DEPARTMENT OF TRANSPORTATION WEBSITE: http://www.iowadot.govler/index.html

UTILITY NOTES SEE SECTION 1107 15 OF THE STANDARD SPECIFICATION REGARDING UTILITY COORDINATION

WASTE AND DISPOSAL NOTES

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY OF REVORDER WASTERIAL (EXCANATED MATERIAL OR BROKEN CONCRETE) WHICH IS NOT DESIRABLE TO BE INCORPORATED INTO THE WORK INVOLVED ON THIS PROJECT IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT AREAS (INCLUDING HALL ROADS) SELECTED FOR WASTE OR DISPOSAL NOT IMPACT I CULTURALLY SENSITIVE SITES OR GRAVES OR STREAM BANKS BELOW THE ORDINARY HIGH WATER MARK; WITHOUT AN APPROVED U.S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES. ON OMATERIAL SHALL BE PLACED WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY STATED IN THE PLANS OR APPROVED BY THE PLANS OR APPROVED BY THE ENGINEER

HAZARDOUS MATERIALS NOTES THE CONTRACTOR SHALL C

THE CONTRACTOR SHALL CONDUCT THEIR OPERATIONS IN SUCH A MANNER THAT ANY PAINT REMOVED DURING REMOVAL IS CONTAINED, COLLECTED, AND DISPOSED OF IN ACCORDANCE WITH SECTION 2508 OF THE STANDARD SPECIFICATIONS.

BEFORE DELIVERY OF ANY SCRAP STEEL THE CONTRACTOR SHALL PROVIDE A WRITTEN NOTICE TO THE RECEIVING FACILITY. THIS NOTICE SHALL AT A MINIMAM INCLIDE:

1. A NOTICE THAT THE SCRAP STEEL IS COATED WITH PAINT THAT HAS REGULATED MATERIALS AT LEVELS THAT COULD BE HAZARDOUS TO EMPLOYTES OR THE ENVIRONMENT.

2. A COPY OF THE SCRAPE SAMPLE PROVIDED IN THE CONTRACT DOCUMENTS.

3. A SIGNATURE BLOCK FOR THE RECEIVING FACILITY. SHALL BE RETURNED TO THE ENGRAMATION. A COPY OF THIS KREMOVED FROM THE RECEIVE ASSOCIATED WITH COMPLIANCE WITH THE ABOVE SCRAPE SAMPLE REMOVED THE MICH DAYS ASSOCIATED WITH COMPLIANCE WITH THE ABOVE REMOVED. THE RECEIVING FACILITY SHALL BE RETURNED TO THE ENGRAME BEFORE ANY SCRAPE STEEL IS REMOVED FROM THE RECEIVING FACILITY SHALL BE RETURNED TO THE ENGRAME BEFORE ANY SCRAPE STEEL IS REMOVED FROM THE RECEIVING FACILITY SHALL BE RETURNED TO THE ENGRAME BEFORE ANY SCRAPE STEEL IS REMOVED FROM THE RECEIVING FACILITY SHALL BE RETURNED TO THE ENGRAME BEFORE ANY SCRAPE STEEL IS REMOVED FROM THE PROCEDURE ASSOCIATED WITH COMPLIANCE WITH THE ABOVE FROM THE PROCEDURE SAMPLE BEFORE ANY SCRAPE STEEL IS REMOVED FROM THE RECEIVING FACILITY OF THE MOVAL AND DISPOSAL REQUIREMENTS WILL BE INCIDENTAL TO "REMOVAL OF EXISTING BRIDGE."

STREAM CROSSING NOTES

THE CONTRACTOR IS ENCOURAGED TO CONDUCT CONSTRUCTION ACTIVITIES DURING A PERIOD OF LOWFLOW ANY TEMPORARY CROSSINGS SHALL INCLUDE ENOUGH CULVERTS TO ACCOMMODATE LOW FLOWS AND MUST BE REMOVED AFTER CONPLETION OF WORK ON THIS PROJECT TEMPORARY STRAM CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STRAMADE ROAD PLAN EWAOT THE CORST OF INSTALLATION, MANTENANCE AND REMOVAL OF TEMPORARY CROSSINGS INCLUDING CULVERTS, SHALL BE INCLUDED IN THE PRICE BID FOR

"MOBILIZATION."

"MOBILIZATION."

PREVENT DIMPING ORG HANDLING AND CONVEYING MATERIALS DURING CONSTRUCTION SHALL BE OPERATED TO PREVENT DIMPING OR SPILLING THE MATERIAL INTO WATERBODIES, STREAMS OR WETLANDS.

CARE SHALL BE TAKEN TO PREVENT NAVY PETROLEUM REDODUCTS, CHEMICALS OR OTHER DELETERIOUS MATERIALS SHALL BE KEPT OUT OF THE STREAMS, WATERBODIES, CONSTRUCTION EQUIPMENT, ACTIVITIES AND MATERIALS SHALL BE KEPT OUT OF THE STREAMS, WATERBODIES CONSTRUCTION EQUIPMENT, ACTIVITIES AND MATERIALS SHALL BE KEPT OUT OF THE STREAMS, WATERBODIES

NETE AND REINFORCING STEEL NOTES

CRETTE FORMS ARE TO REMAIN IN PLACE 5 DAYS OR LONGER IN ACCORDANCE WITH ARTICLE 2403 03. M. 2 OF ALMONAD SEPECIFICATIONS. EXCEPT THE MINIMUM CONCRETE FLEXURAL STRENGTH REQUIRED BEFORE REMOVAL OF FORMS SHALL BE 575 PS.

ALL REINFORCING STEEL SHALL BE SECURELY WIRED IN PLACE BEFORE CONCRETE IS PLACED BAR CHAIRS SPACED AT NOT IN THAM 3.°C SCHIERS IN BETHER DIRECTION SHALL BE USED TO SUPPORT ALL REINFORCING IN ACCORDANCE WITH THE SECTION 2404 OF STANDARD SPECIFICATIONS

CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2"UNLESS OTHERWISE

ALL REUNCORCING BARGAND BARS NOTED AS DOWELS SUPPLIED FOR THIS STRUCTURE SHALL BE DEFORMED REINFORGEMENT UNLESS OTHERWASE NOTED OR SHOWN.

KEYWAY DIMENSIONS SHOWN ON THE PAKASARE ASSED ON NOMINAL DIMENSIONS UNLESS STATED OTHERWASE IN ADDITION BEYEL USED ON THE KEYWAY SHALL BE LIMITED TO A MAXIMUM OF 10 DEGREES FROM THE VERTICAL. ALL EXPOSED CORNERS 90 DEGREES OR SHARPER ARE TO BE FILLETED WITH A 3/4" DRESSED AND BEVELED

THE CONTRACTOR'S WORK AREA

THE CONTRACTOR'S WORK AND MATERIAL STORAGE AREA SHALL BE DEFINED BY THE CONTRACTOR AND NOTED TO THE ENGINEER HE CONTRACTOR SHALL SHARE, FERTILLE, AND SEED THIS CONTRACTOR'S AREA IN ORDER TO RETURN IT OITS ONGINAL CONDITION. FAVILENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR SEEDING AND FERTILIZING (RUFALY, AND "MULCHING" BID TEMS, AREAS OUTSIDE THE CONTRACTOR'S HALL BE HEAPIRED TO THEIR ORGINAL, CONDITION. AS DETERMINED BY THE ENGINEER AND ADDITIONAL PAYMENT WILL BE AUTHORIZED FOR THIS WORK.

PILE NOTES
SOUNDING AND TEST BORING DATA SHOWN ON PLANS WERE ACCUMULATED FOR DESIGNING AND ESTIMATING PURPOSES.
THEIR INCLUSION IN THE PLANS DOES NOT CONSTITUTE A GUARANTEE THAT CONDITIONS OTHER THAN INDICATED WILL NOT

BE ENCOUNTERED.

THIS PROJECT USES THE LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHODOLOGY FOR DETERMINING PILE CONTRACT
THIS PROJECT USES THE LOAD AND RESISTANCE. NOMINAL AXIAL BEARING RESISTANCES WILL BE LARGER THAN BEARING
LENGTH AND NOMINAL XXIAL BEARING RESISTANCE. NOMINAL AXIAL BEARING REPROXIMATELY THE SAME
VALUES IN THE PAST BUT CONSTRUCTION CONTROL BLOW COUNTS WILL BE APPROXIMATELY THE SAME
VALUES IN THE PAST BUT CONSTRUCTION CONTROL BLOW COUNTS WILL BE APPROXIMATELY THE SAME
VALUES AND BEARING GRAPH WILL BE REFEARED BY THE CONTRACTING AUTHORITY THAT GIVES THE
RELATIONSHIP BETWEEN REQUIRED NOMINAL AXIAL BEARING RESISTANCE AND BLOW COUNT

ABUTMENT PILES

THE CONTRACT LENGTH OF 65 FEET FOR THE ABUTMENT PILES IS BASED ON A MIXED SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 138 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.70 FOR ROCK END BEARING.

170 FOR ROCK END BEARING.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.70 FOR ROCK END BEARING.

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR ABUTMENT PILES IS 103 TONS AT END OF DRIVEOR RETAPS. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL CONSTRUCTION CONTROL.
REQUIRES A WEAP AMALYSIS WITH BEARING GRAPH.

PHER FOOTING PILES

THE CONTRACT LENGTH OF 45 FEET FOR THE PIER PILES IS BASED ON A MIXED SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 143 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PH)) OF 0.85 FOR SOIL, AND 0.70 FOR ROCK END BEARING

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PH) 07 0.85 FOR SOIL AND 0.70 FOR ROCK END BEARING PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF FOOTING

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR ABUTMENT PILES IS 103 TONS AT END OF DRIVE OR RETAP THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. CONSTRUCTION CONTROL. REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH

DESIGN FOR 0° SKEW

81'-0" END SPANS PRESTRESSED CONCRETE BEAM BRIDGE 243'-0" x 30'-6" PRETENSIONED

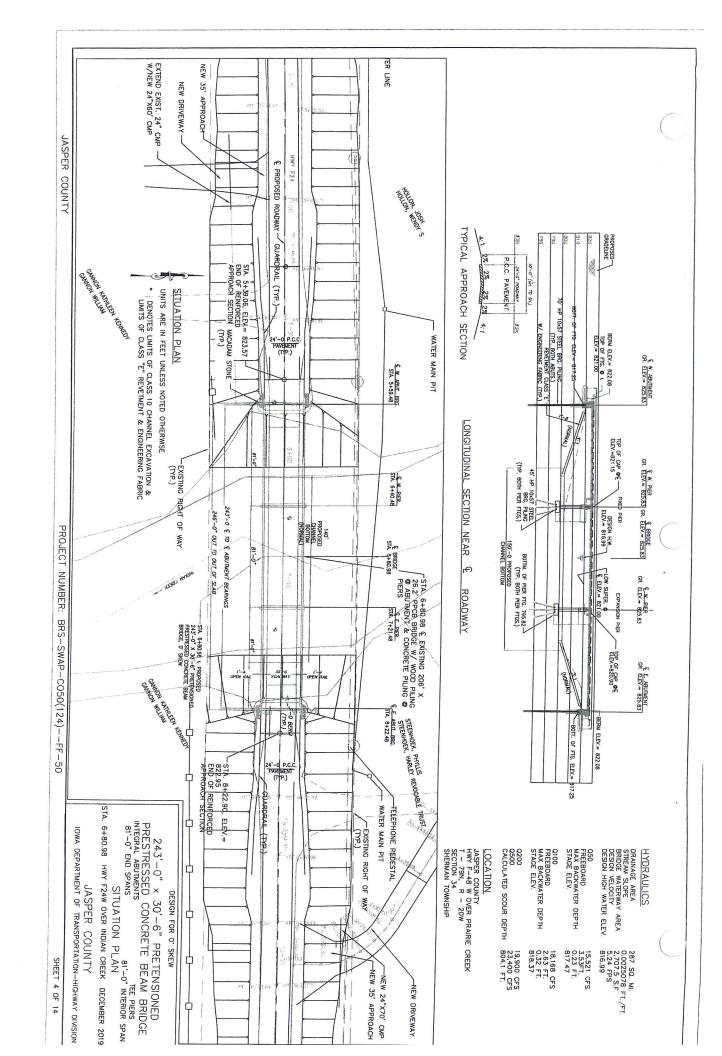
STA, 6+80.98 HWY F24W OVER INDIAN CREEK DECEMBER 2019 JASPER COUNTY

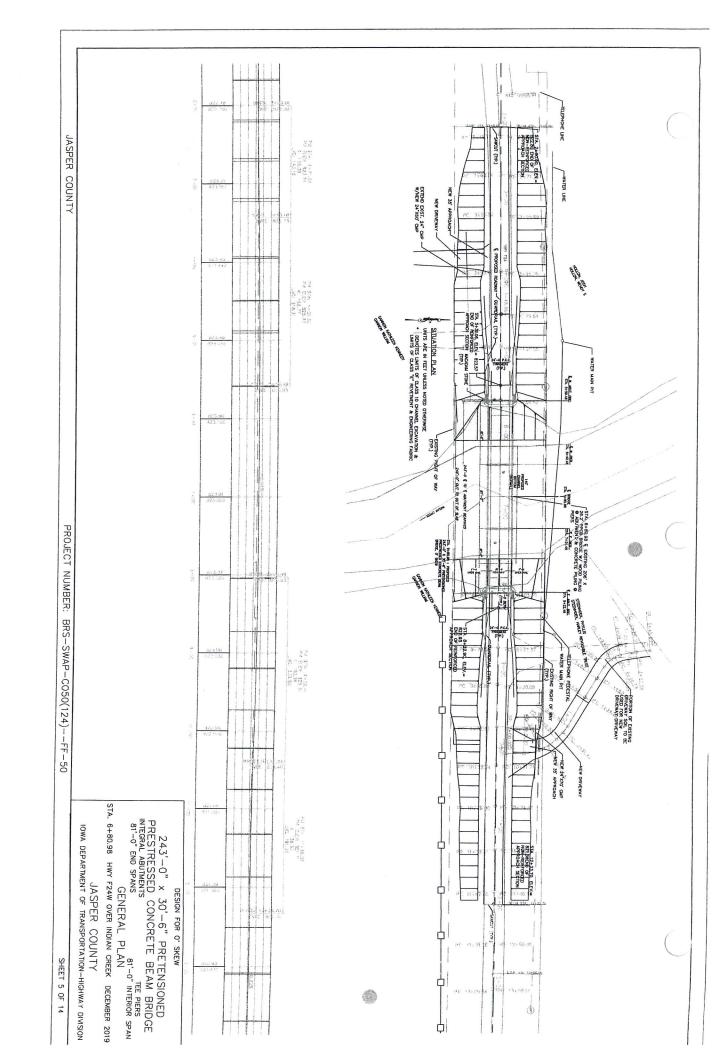
GENERAL NOTES

81'-0" INTERIOR SPAN

IOWA DEPARTMENT OF TRANSPORTATION-HIGHWAY DIVISION

JASPER COUNTY





IOWA DEPARTMENT OF TRANSPORTATION-HIGHWAY DIVISION JASPER COUNTY

STA, 6+80.98 HWY F24W OVER INDIAN CREEK DECEMBER 2019

SOUNDING DATA

TEE PIERS 81'-0" INTERIOR SPAN

PRESTRESSED CONCRETE BEAM BRIDGE INTEGRAL ABUTMENTS

81'-0" END SPANS

81'-0" INTERIOR SPAI

243'-0" x 30'-6" PRETENSIONED

DESIGN FOR 0° SKEW

Surface Elevation 10wa RTN Derived 16 SSA 50/3" 16.5 Sample No
Type
SPT bpf
Monaure
Content 76
Ony Density
pct
Unconfined
Correpressive
Strungth
pst 23 143 36 13.3 25 | 15.3 P 4 20.2 14.2 11.3 3610 17.5 108 2000 18.3 109 3460 NORTHING 647370.826 EASTING 1708853.404 Project No. 191123 ALLENDER BUTZKE ENGINEERS, INC. TILL
(Firm FILL
(Firm Hig, Cay)

Very Lank Noorn very many lean easy, most
(OHESVE, ALLEVNUM
(Firm Hig, Cay)
Brown-gray fire to medium and imag grayel End of Boring HOT VIX ASPHALT (5".5)
CRUSHED ROCK WITH FINES (4".7)
Dark brawn and dark gray very sandy tean day
muset Dark brown-gray to dark gray sandy lean to fat of face gravel, moist GRANULAR ALLUVIUM
(Fine Sand)
Possible gravel layer from 38' to 40' ite Drated 2/4/19 Onling Meaned HSA Ving Origin it 86 Page I of Geotechnical | Environmental | Construction Q.C. (Very Firm Sandy Glacial Clay) Material Description 35 **∭** Graphic Log USCS 2 SP Water Level Depth Elevation 8727 8727 8727 813 813 737.5 770.5

795

30 6 SSA

, 10 SSA

12

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SSA

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water.	Time at	The 55	 3	750		76.5	786		, j	35		Elevation	Catum Catum	
18	at completion	ablicat	 ś.	3		3	4		ő	-7.		Oepth ft	Cigva	11
- KI	etion	Water	 4	01	٥.	4.	U.	12				Sample No	9	Over Indian Creek, Sasper County, Iowa
	1	tave!	 SSA	SSA	SSA	SSA	YSS	ASS	ZS.			Гуре	low	unity,
	173	On lines represent the no Water Lavel Observation	ħ	3	27	ř	5	ø	Sea			SPT bpt	lowa RTN Derived	lowa
M		ממה פולה	 5.5	20.5	#	15.5						Moisture Content %	Derive	8.3.
		E-ULKC)		2 (5)								Dry Density per	red *	Power
.⇒ ≪ H	days	ite boundary							The second second			Unconfined Compressive Strength psf		Over Indian Creek, Sec. 3, Poweshick Twp Jasper County, Iowa
Geotechnical Environmental Construction O C	ALLENDER BUTZKE ENGINEERS, INC.	The stratification lines represent the reproximate boundary times between material types, in-shu, the transition may be gradual. Water Lavel Observation	End of Bering	(Very Firm Sandy Glacial Clay)	PRE-ILLINOJAN GLACIAL TILL	Dark (173) sandy tenn to fai clay, trace gravel, moist		GRANULAR ALLUVIUM (Fine Sand)	WATER Brown-gray fine in medium cand, saurated	AIR TO CREEK	PC CONCRETE DECK WITH REBAR (6".5)	Material Description	Date Driffed 2/4/19 Onling Method: HSA Driffing Death it 86 Page 1 of	Client Jasper County Fagineer 910 N 11th Avenue Newton, IA 50208
STILL	NEE	gradu				3.5 						Log	-	
ion (RS,	-	 			x C				1		USCS Water Level		
Š	7	11	36 737 4			7 22			500 0 577 5 77 208 70 70	27	23.2 0.7	Depth		

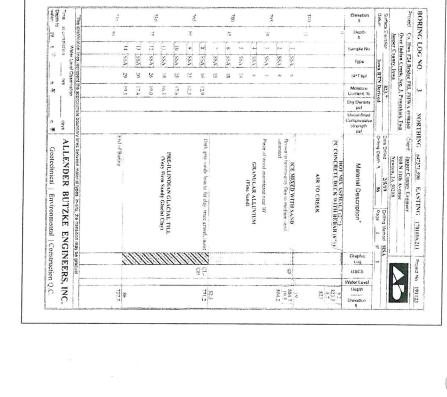
SHEET 7 OF 14

IOWA DEPARTMENT OF TRANSPORTATION-HIGHWAY DIVISION JASPER COUNTY STA. 6+80.98 HWY F24W OVER INDIAN CREEK DECEMBER 2019

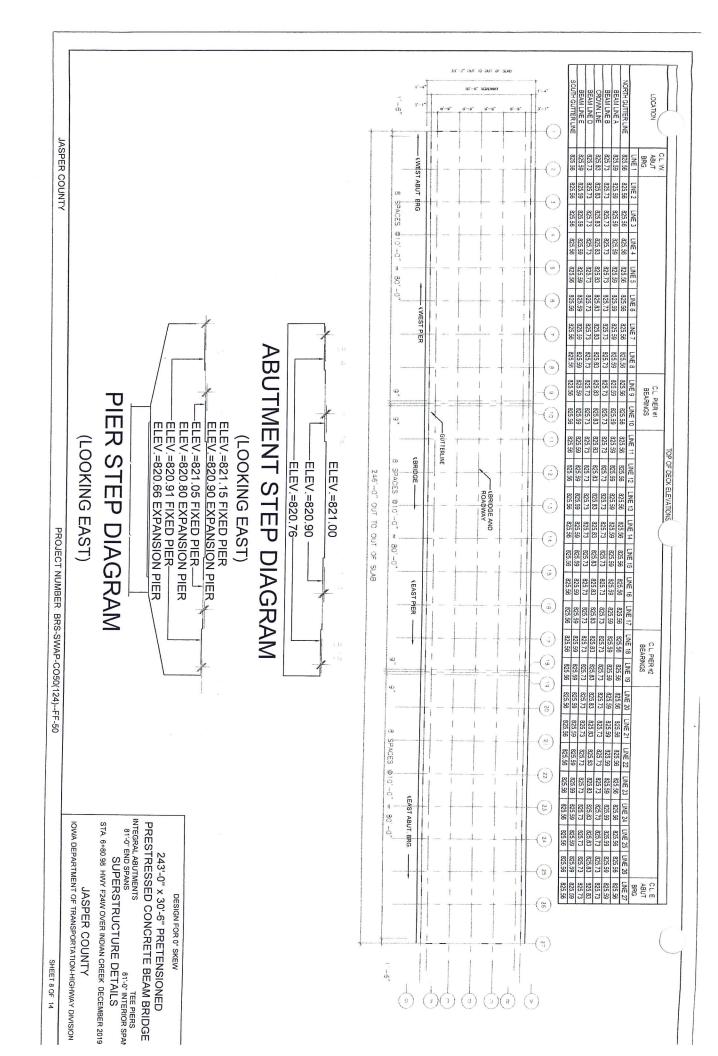
SOUNDING DATA

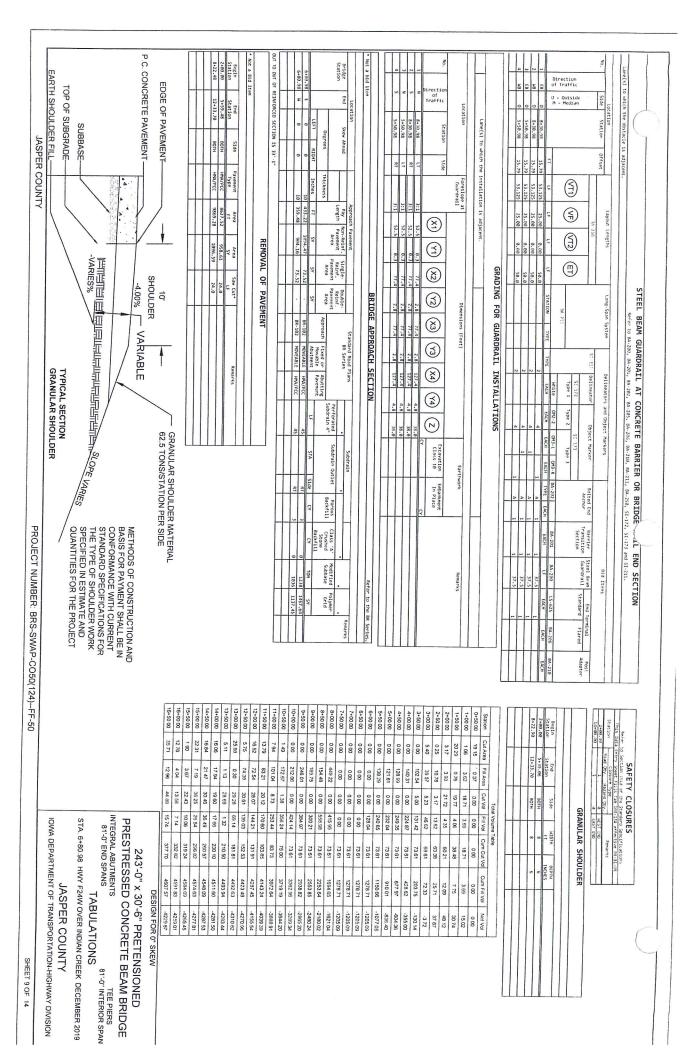
INTEGRAL ABUTMENTS 81'-0" END SPANS 243'-0" x 30'-6" PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE TEE PIERS 81'-0" INTERIOR SPAN

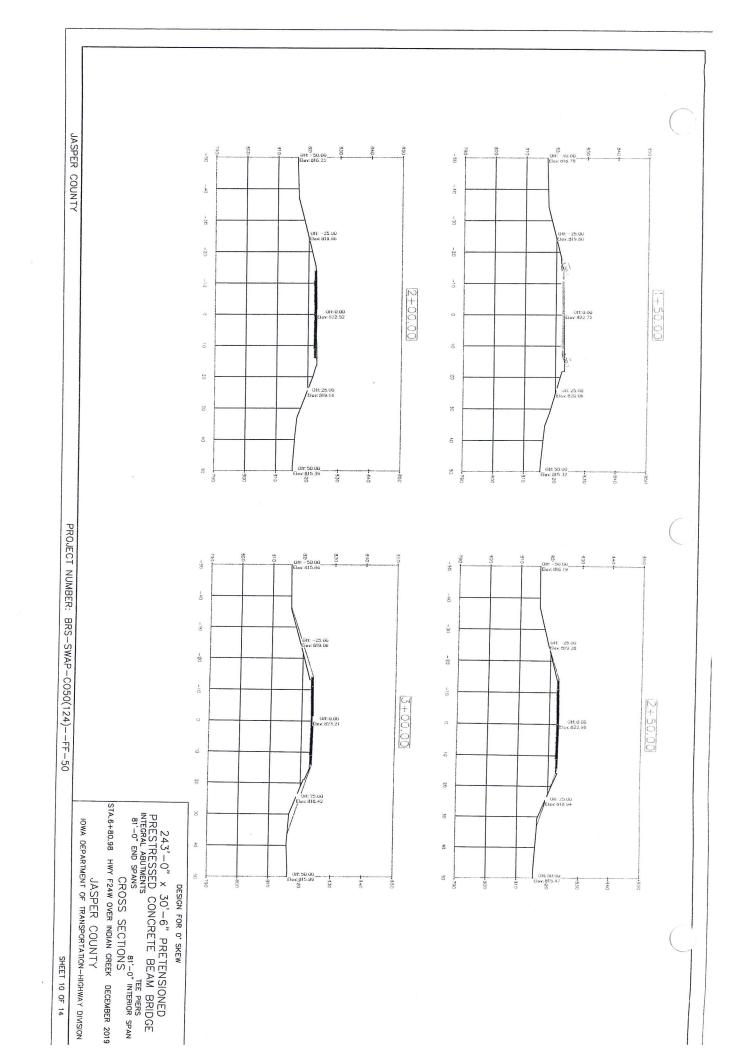
DESIGN FOR 0° SKEW

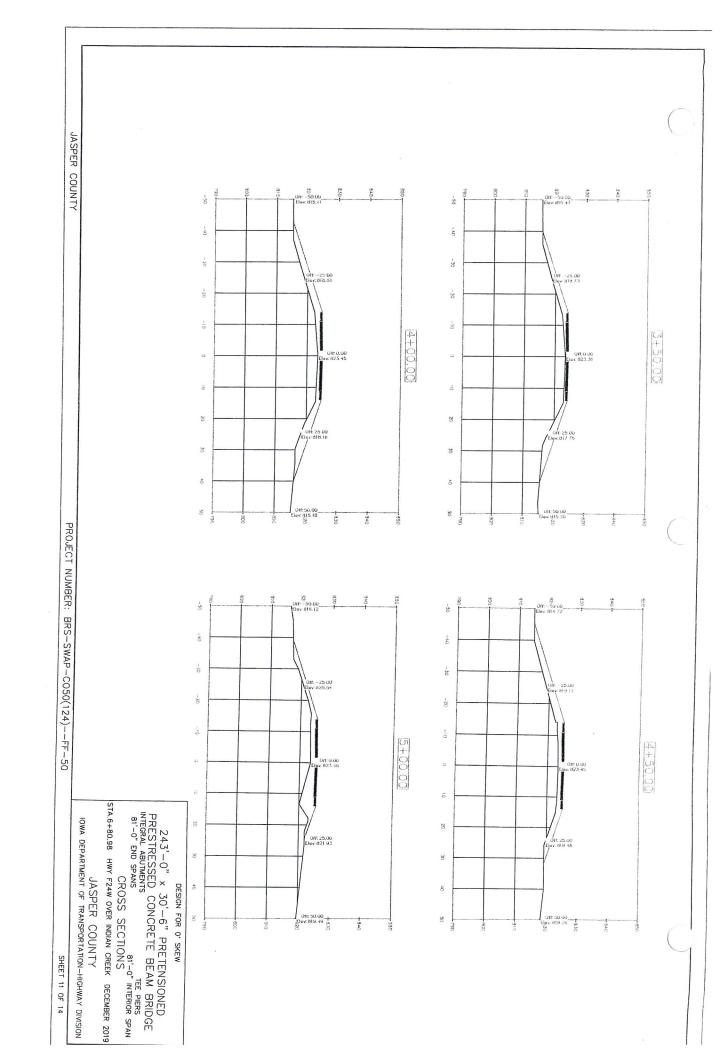


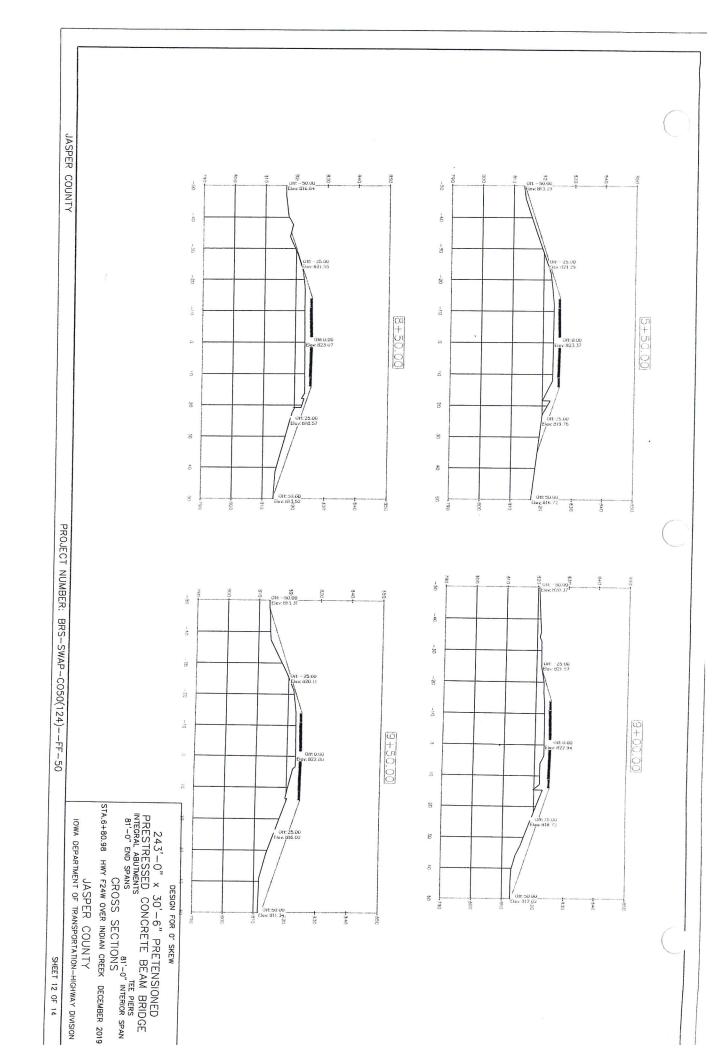
water o	Time a	1719 \$		750	765	780		705	\$		Elevation	Datum	roject
×	at completion	tratticat	8		E	5		#	×		Depth t	a Elevation	1
4	etion	Water Level Observation								14 -	Sample No.	3	Co. Hwy F24 Bridge Over Indian Creek, ' Jasper County, Jowa
- ALLEY		S repre							888	7.88 3.1	Type	lows	an Cre
-30	ng.	Sent th								30	SPT bpf	RTV	owa
×	1	9 3000								170	Moisture Content, %	lowa RTN Derived	03. FI
		oximat							-	9	Dry Density pcf	12	awa.
-(4	days	boundary	· 							540	Unconfined Compressive Strength psf		Co. Hwy. F24 Bridge F03, FHWA #198460 Over Indian Creek, Sec. 3, Poweshiek Twp Jacper County, Iowa
Geotechnical Environmental Construction O.C	ALLENDER BUTZKE ENGI	The stratication lines represent the approximate boundary lines between material types; in-situ, the transition may be gradual. Water Layer Cheenation	Construction of the Constr	nd of Rocker	PRE-ILLINOIAN GLACIAL TILL	Possible gravel layer from 31 to 33* Dark unity sandy from to fat dry, trace gravel, most	GRANULAR ALLUVIUM (Fine Sand)		Orik brown saidy dit, moist COHSSUPE ALLAVIUM (SHIT/Sand) Silo Brown to brown-uray line to medium sand, teace gravel, stutted	CRUSHED ROCK WITH FINES (4"-2) Dark brown and dark gray vary sands ban day, mosst	Material Description*	Data Onlind 2/5/19 Onling Mathod HSA Onling Depth 1, 86 Page I of	Olent Jasper County Engineer 210 N 11th Wenne Newton, IA 50208
nstru	ZE	on prad		HIIII					177-17		Graphic Log	- 2	
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0.0	ENGINEERS, INC.		737.4	3		770.50			206° 206° 206° 206° 206° 206° 206° 206°	រី ១៥១	Water Level Depth Elevation		Ó

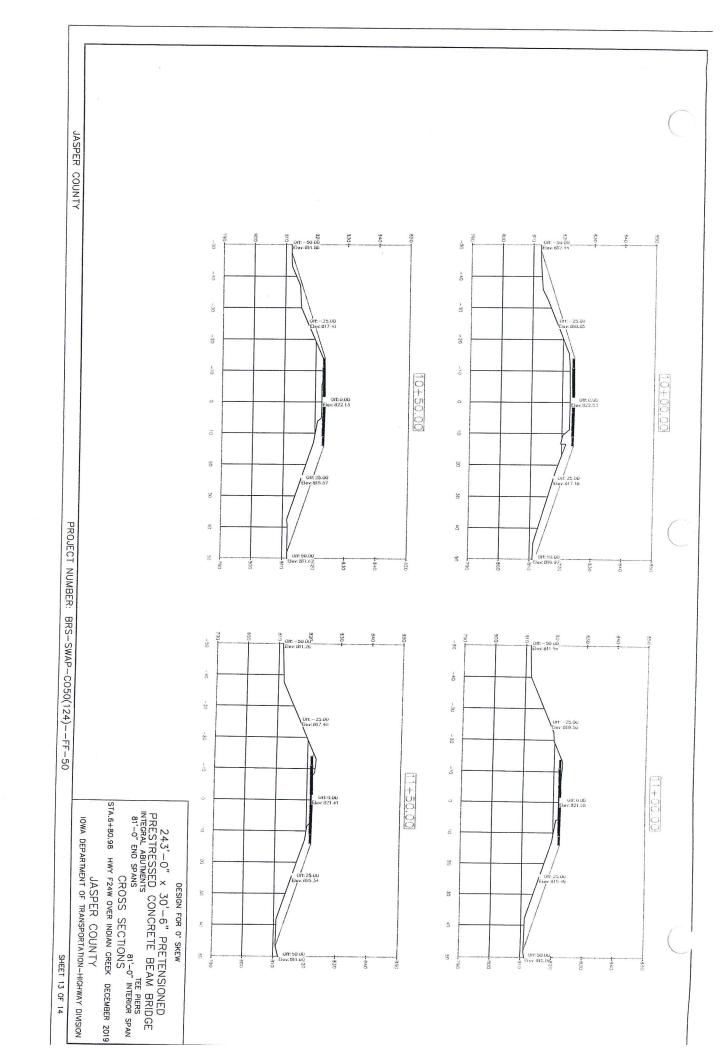












JASPER COUNTY 830 840 -50 -40 - 50 -30 -20 -20 -10 -10 12+50.00 12+00.00 õ 0 20 20 30 PROJECT NUMBER: BRS-SWAP-C050(124)--FF-50 å 50 -830 243'-0" x 30'-6" PRETENSIONED
PRESTRESSED CONCRETE BEAM BRIDGE
INTEGRAL ABUTMENTS
81'-0" END SPANS
CROSS SECTIONS
STA.6+80.98 HWY F24W OVER INDIAN CREEK DECEMBER 2019 JASPER COUNTY IOWA DEPARTMENT OF TRANSPORTATION-HIGHWAY DIVISION DESIGN FOR O' SKEW SHEET 14 OF 14