

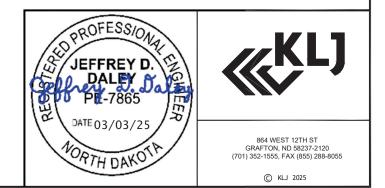
TE PROJECT NO.			PCN SECTION NO.			SHEET NO.
BRP-0034(035)			23558	8	1	1
G	OVERNING SPECIFICATIONS		ate Publishe by the No epartment o	orth [	Dakota	
	Standard Specifications		7/1/2	202	4	
	Supplemental Specifications		N	DNE	Ξ	
Ρ	ROJECT LENGTH					
P	ROJECT		GROSS MILES		NET MILES	
3	4-121-04.0	$\top$	0.0047	(	0.0047	
3	4-127-05.0	$\top$	0.0110	(	0.0110	
3	4-126-07.0		0.0058	(	0.0058	
3	4-126-08.1		0.0058	(	0.0058	
3	4-123-12.0		0.0042	(	0.0042	
3	4-128-16.0		0.0051	(	0.0051	
3	4-128-18.0		0.0044	(	0.0044	
3	4-120-25.0		0.0049	(	0.0049	
3	4-125-27.0		0.0046	(	0.0046	
3	4-108-30.0		0.0076	(	0.0076	
3	4-105-29.0		0.0081	(	0.0081	
3	4-109-25.0		0.0068	(	0.0068	
3	4-106-23.1	1	0.0047	(	0.0047	
3	4-105-21.3	1	0.0043	(	0.0043	
3	4-105-21.2	1	0.0057	(	0.0057	
3	4-106-21.0	1	0.0046	(	0.0046	
3	4-101-05.1	1	0.0045	(	0.0045	
	TOTAL		0.0968	(	0.0968	

PS&E Corrections Made

March 2023

Surveyed & Designed Date

August 2022 - March 2023



# TABLE OF CONTENTS

## PLAN SECTIONS

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1	1	Title Sheet
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6	1	Plan Notes
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8	1	Estimated Quantities
100	1	Traffic Control Devices List
100	2	Typical Construction Signing Layout
170	1	Bridge Layout
170	2-3	Details

		LIST OF STANDARD DRAWINGS
	Number	Description
-	D-101-1, 2, 3, 4	NDDOT Abbreviations
	D-101-10	NDDOT Utility Company and Organization Abbreviations
	D-101-20, 21	Line Styles
	D-101-30, 31, 32, 33	Symbols
	D-704-7	Breakaway Systems For Construction Zone Signs - Perforated Tub
	D-704-8	Breakaway Systems For Construction Zone Signs - U-Channel Pos
	D-704-9	Construction Sign Details - Terminal And Guide Signs
	D-704-10	Construction Sign Details - Regulatory Signs
	D-704-11, 11A	Construction Sign Details - Warning Signs
	D-704-13	Barricade And Channelizing Device Details
	D-704-14	Construction Sign Punching And Mounting Details
	D-704-19	Road Closure And Lane Closure On A Two Way Road Layouts
	D-704-21	Detour And Roadway Diversion Sign Layouts
	D-704-50	Portable Sign Support Assembly

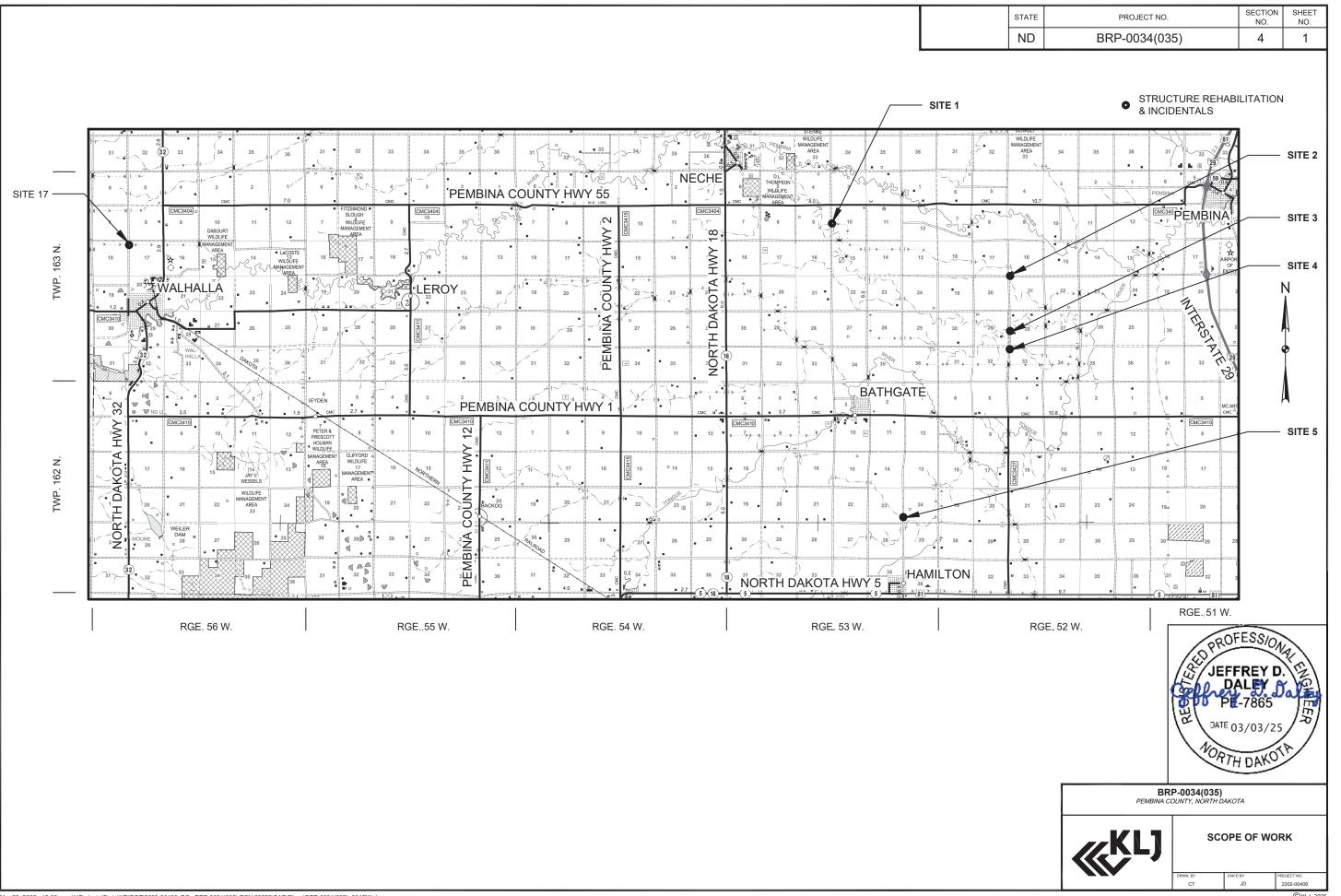
### SPECIAL PROVISIONS

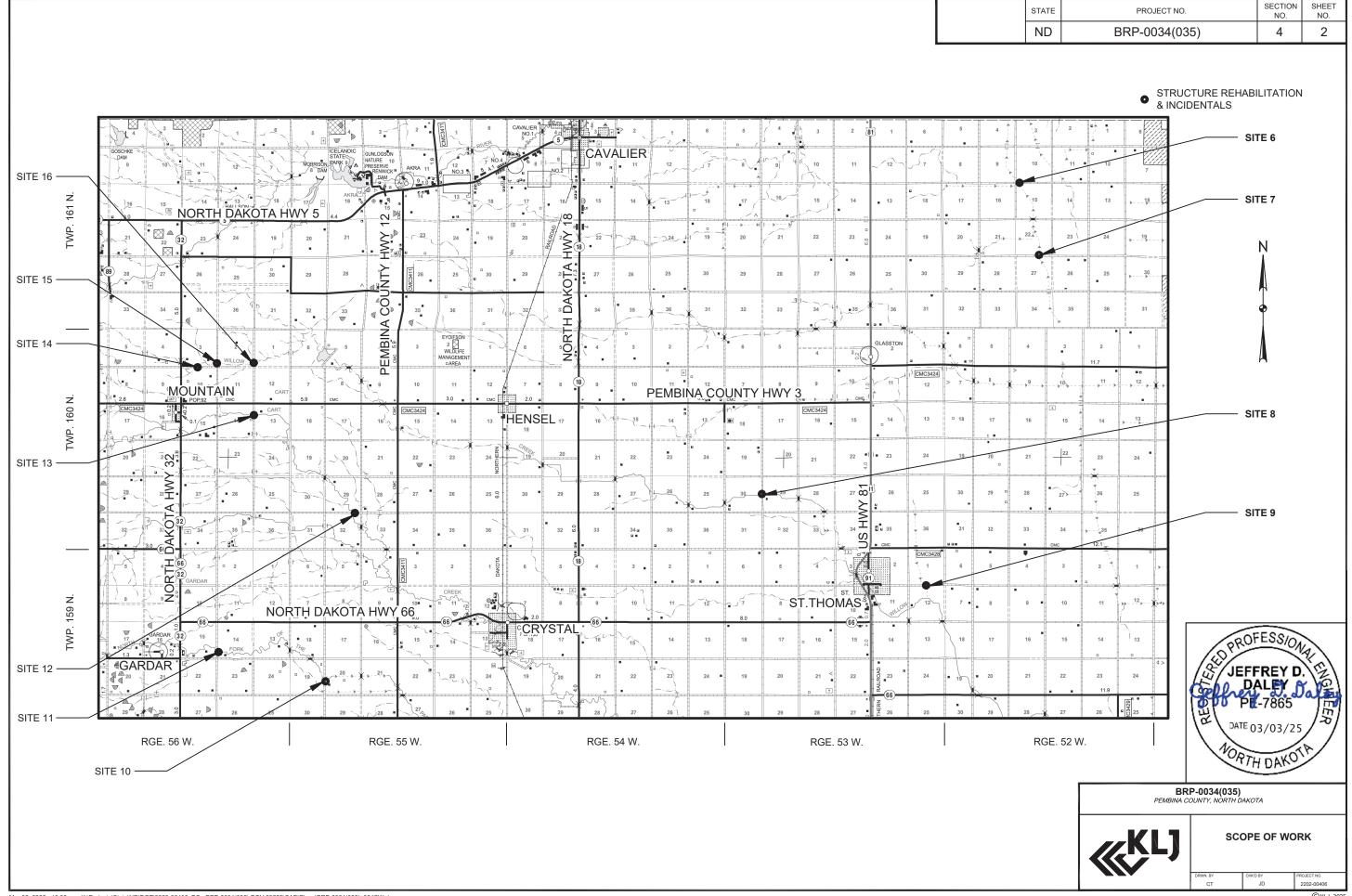
## Number Description

PSP 70(24) Permits and Environmental Considerations

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	BRP-0034(035)	2	1
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# PLAN NOTES

**100-P01 COORDINATION OF PROJECTS:** Provide Pembina County with two weeks notice before starting work on this project. Pembina County will remove the gravel surfacing per the Retrofit Detail Summary table on Sheet 1, Section 170.

**704-P01 TRAFFIC CONTROL FOR STRUCTURE REHABILITATION:** Use the construction signing layouts on Sheet 2, Section 100 as an example as to how the signs are to be set up for each site while work is in progress at the site. Sites 8, 10, and 11 are currently closed and the traffic control will remain in place until the bridge is inspected by the NDDOT. On all other sites, once work is completed at a site, the Contractor shall move the signs to the next site that work will take place. The bid item TRAFFIC CONTROL SIGNS includes the setting up and taking down of signs for all the site locations. There are 4 sign set ups included in the traffic control quantities. Provide additional signs at no cost to the Owner if needed for Contractor operations. The Contractor will be allowed to close the roadway for 14 calendar days at each site, excluding Sites 8, 10, and 11. Liquidated damages, in the amount of \$900/calendar day will be assessed for each day beyond the 14 calendar days.

The traffic control devices list has been developed using the following layouts on the Standard Drawings for traffic control:

- Standards D-704-19, Type E: For road closure to all traffic. Detour is not provided.
- Standards D-704-7, 8, 9, 10, 11, 11A, 13, 14, 19, 21 and 50 are applicable.

NO.       NO.       NO.       NO.         ND       BRP-0034(035)       6       1         Image: constraint of the state of the s	STATE	PROJECT NO.		SECTION	SHEET
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BRP-0034(035) PEMBINA COUNTY, NORTH DAKOTA PLAN NOTES DRWN. BY CHKD. BY PROJECT NO.			E P	-7865	
PEMBINA COUNTY, NORTH DAKOTA PLAN NOTES DRWN. BY CHKD. BY PROJECT NO.		BR	NORTH		/ /
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## **ENVIRONMENTAL NOTES**

**ENVIRONMENTAL NOTES (EN):** Pembina County, the North Dakota Department of Transportation, and the Federal Highway Administration have made environmental commitments to secure approval of this project. The following environmental notes are requirements to comply with these commitments:

**EN-1** AQUATIC NUISANCE SPECIES (ANS): Equipment that was last used outside of North Dakota or within a Class I infested waterbody (identified on the North Dakota Game and Fish Department (NDGFD) website) requires an inspection by NDGFD. Notify the NDGFD at least 10 business days prior to pumps, watercraft, or any equipment entering a public water to allow the NDGFD sufficient time to inspect any and all such equipment for ANS. Contact the NDGFD ANS Coordinator, Ben Holen by e-mail - bholen@nd.gov for equipment inspections. Supply one of the following to the Engineer as proof of compliance prior to work taking place in the water: (1) the NDGFD inspection report, (2) documented NDGFD correspondence (email or signed letter).

STATE	PROJECT NO.		SECTION NO.	SHEET NO.
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# **Estimated Quantities**

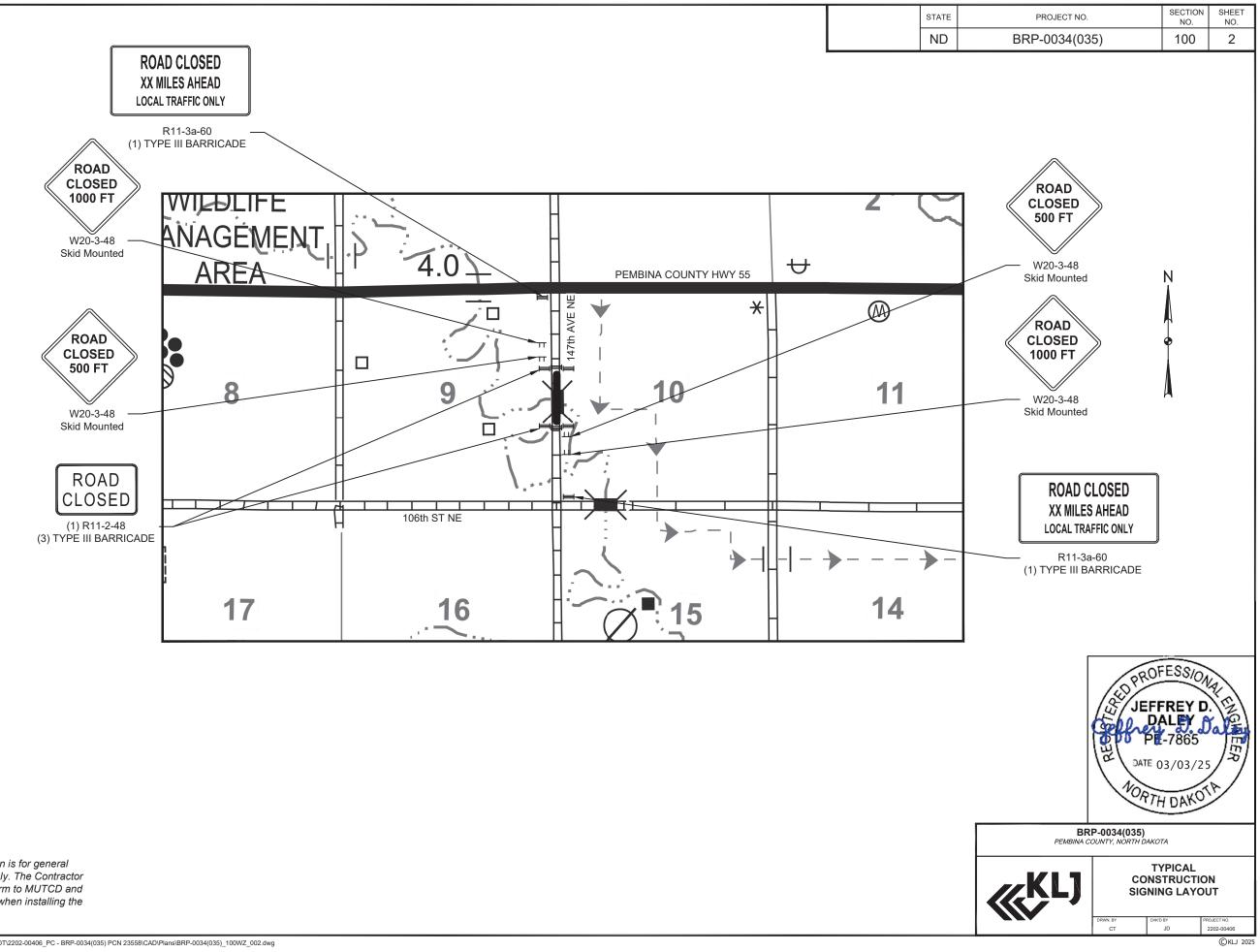
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SPEC	CODE	ITEM DESCRIPTION	UNIT		
103	0100	CONTRACT BOND	L SUM	1	
616	0360	STRUCTURAL STEEL	LBS	77739	
702	0100	MOBILIZATION	L SUM	1	
704	1000	TRAFFIC CONTROL SIGNS	UNIT	776	
704	1052	TYPE III BARRICADE	EA	32	
930	9504	BRIDGE REPAIR	L SUM	1	
930	9650	ABUTMENT REPAIR	SF	195	

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1 77739 1 776 32 1				
1 77739 1 776 32 1				
77739 1 776 32 1			TOTAL	
1 776 32 1				
776 32 1				
1				

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
E5-1-48	48"x48"	EXIT GORE		35	
G20-1-60 G20-1b-60	60"x24" 60"x24"	ROAD WORK NEXT MILES		28	
G20-1D-60 G20-2-48	48"x24"	NO WORK IN PROGRESS (Sign and installation only) END ROAD WORK		18 26	
G20-4-36	36"x18"	PILOT CAR FOLLOW ME (Mounted to back of pilot car)		18	
G20-4b-36	36"x30"	WAIT FOR PILOT CAR		18	
G20-50a-72 G20-52a-72	72"x36" 72"x24"	ROAD WORK NEXT MILES RT & LT ARROWS           ROAD WORK NEXT         MILES RT or LT ARROW		43 36	
G20-55-96	96"x48"	SPEED LIMIT ENFORCED - MINIMUM FEE \$80 WHEN WORKERS PRESENT		59	
M1-1-36	36"x36"	INTERSTATE ROUTE MARKER (Post and installation only)		11	
M1-4-24 M1-5-24	24"x24" 24"x24"	U.S. ROUTE MARKER (Post and installation only) STATE ROUTE MARKER (Post and installation only)		10 10	
M3-1-24	24"x12"	NORTH (Mounted on route marker post)		7	
M3-2-24	24"x12"	EAST (Mounted on route marker post)		7	
M3-3-24 M3-4-24	24"x12" 24"x12"	SOUTH (Mounted on route marker post) WEST (Mounted on route marker post)		7 7	
M4-8-24	24 x12	DETOUR (Mounted on route marker post)		7	
M4-9-30	30"x24"	DETOUR ARROW RIGHT or LEFT/AHD AND RT or LT		15	
M4-10-48 M5-1-21	48"x18" 21"x15"	DETOUR (INSIDE ARROW) RIGHT or LEFT (Mounted on barricade) ADVANCE TURN ARROW RT or LT(Mounted on route marker post)		7 7	
M5-1-21 M5-1-30	30"x21"	ADVANCE TORN ARROW RT OF LT(Mounted on route marker post)		9	
M6-1-21	21"x15"	DIRECTIONAL ARROW RT or LT (Mounted on route marker post)		7	
M6-1-30	30"x21"	DIRECTIONAL ARROW RT or LT (Mounted on route marker post)		9	
M6-3-21 R1-1-48	21"x15" 48"x48"	DIRECTIONAL ARROW UP (Mounted on route marker post) STOP		7 32	
R1-1-46 R1-2-60	40 x40 60"x60"	YIELD		29	
R2-1-36	36"x48"	SPEED LIMIT (Portable only)		30	
R2-1-48	48"x60"	SPEED LIMIT		39	
R2-1aP-24 R3-2-48	24"x18" 48"x48"	MINIMUM FEE \$80 (Mounted on Speed Limit post) NO LEFT TURN		10 35	
R4-1-48	48"x60"	DO NOT PASS		39	
R4-7-48	48"x60"	KEEP RIGHT		39	
R5-1-48	48"x48"			35	
R6-1-54 R7-1-12	54"x18" 12"x18"	ONE WAY RIGHT or LEFT (Mounted on STOP or DO NOT ENTER post) NO PARKING ANY TIME		14 11	
R10-6-24	24"x36"	STOP HERE ON RED		16	
R11-2-48	48"x30"	ROAD CLOSED (Mounted on barricade)	8	12	9
R11-2a-48	48"x30"	STREET CLOSED (Mounted on barricade)		12	
R11-3a-60 R11-3c-60	60"x30" 60"x30"	ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY (Mtd on barricade) STREET CLOSED MILES AHEAD LOCAL TRAFFIC ONLY (Mtd on barricade)	8	15 15	12
R11-4a-60	60"x30"	STREET CLOSED TO THRU TRAFFIC (Mounted on barricade)		15	
W1-3-48	48"x48"	REVERSE TURN RIGHT or LEFT		35	
W1-4-48 W1-4b-48	48"x48" 48"x48"	REVERSE CURVE RIGHT or LEFT TWO LANE REVERSE CURVE RIGHT or LEFT		35 35	
W1-40-48	48"x24"	ONE DIRECTION LARGE ARROW		26	
W3-1-48	48"x48"	STOP AHEAD		35	
W3-3-48	48"x48"	SIGNAL AHEAD		35	
W3-4-48 W3-5-48	48"x48" 48"x48"	BE PREPARED TO STOP SPEED REDUCTION AHEAD		35 35	
W4-2-48	48"x48"	LANE ENDS RIGHT or LEFT		35	
W5-1-48	48"x48"	ROAD NARROWS		35	
N5-8-48	48"x48"	THRU TRAFFIC RIGHT LANE		35	
N5-9-48 N6-3-48	48"x48" 48"x48"	ROAD WORK TRAFFIC ONLY DOWN & LT or RT ARROW TWO WAY TRAFFIC		35 35	
W8-1-48	48"x48"	BUMP		35	
W8-3-48	48"x48"	PAVEMENT ENDS		35	
W8-7-48 W8-11-48	48"x48" 48"x48"	LOOSE GRAVEL UNEVEN LANES		35 35	
W8-11-46 W8-12-48	40 x40 48"x48"	NO CENTER LINE	1	35	
W8-17-48	48"x48"	SHOULDER DROP-OFF SYMBOL		35	
N8-53-48	48"x48"			35	
N8-54-48 N8-55-48	48"x48" 48"x48"	TRUCKS ENTERING AHEAD or FT or MILE TRUCKS CROSSING AHEAD or FT or MILE	-	35 35	
N8-56-48	48"x48"			35	
N9-3a-48	48"x48"	CENTER LANE CLOSED SYMBOL		35	
N13-1P-30	30"x30"	MPH ADVISORY SPEED PLAQUE (Mounted on warning sign post) NO PASSING ZONE	-	14	
N14-3-64 N16-2P-30	64"x48" 30"x24"	FEET PLAQUE (Mounted on warning sign post)	-	28 10	
N20-1-48	48"x48"	ROAD WORK AHEAD or _FT or _ MILE		35	
N20-2-48	48"x48"			35	
N20-3-48 N20-4-48	48"x48" 48"x48"	ROAD or STREET CLOSED AHEAD or FT or MILE ONE LANE ROAD AHEAD or FT or MILE	16	<b>35</b> 35	5
W20-4-48 W20-5-48	48"x48" 48"x48"	RIGHT or CENTER or LEFT LANE CLOSED AHEAD or FT or MILE	1	35	
N20-7-48	48"x48"	FLAGGER		35	
N20-8-18	18"x18"	STOP - SLOW PADDLE Back to Back		5	
N20-52P-54 N21-1-48	54"x12" 48"x48"	NEXT MILES (Mounted on warning sign post) WORKERS	-	12 35	
N21-1-48 N21-2-48	48"x48" 48"x48"	FRESH OIL		35	
	48"x48"	ROAD MACHINERY AHEAD or FT or _ MILE		35	
N21-3-48					
N21-3-48 N21-5-48 N21-5a-48	48"x48" 48"x48"	SHOULDER WORK RIGHT or LEFT SHOULDER CLOSED		35 35	

				STATE			PRO	JECT NO.	SECTION NO.	SHEET NO.
				ND			BRP-0	0034(035)	100	1
SIGN NUMBER	SIGN SIZE	DESCRIPTION		AMO REQU		UNITS PER AMOUNT	UNITS SUB TOTAL			
W21-6-48	48"x48"	SURVEY CREW				35				
W21-50-48 W21-51-48	48"x48" 48"x48"	BRIDGE PAINTING AHEAD or FT MATERIAL ON ROADWAY				35 35				
W21-52-48	48"x48"	PAVEMENT BREAKS				35				
W21-53-48 W22-8-48	48"x48" 48"x48"	RUMBLE STRIPS AHEAD FRESH OIL LOOSE ROCK				35 35				
W24-1-48	48 x48 48"x48"	DOUBLE REVERSE CURVE				35				
SPECIAL SI	GNS									
								NOTE: If additional sign required, units v	will be	
SPEC & COI 704-1000		TRAFFIC CONTROL SIGNS	TOTAL UNITS				776	calculated using from Section III		
					_			Design Manual. http://www.dot.r		
SPEC & CODE 704-0100	FLAGGIN		MHR	QUANTI	TΥ					
704-1048 704-1050		LE RUMBLE STRIPS ARRICADES	EACH EACH							
704-1050 704-1052		ARRICADES BARRICADES	EACH		32					
704-1060	DELINEA	TOR DRUMS	EACH						FESSION	
704-1065 704-1067	TRAFFIC	CONES R MARKERS	EACH EACH					PRI		6
704-1070	DELINEA	TOR	EACH							Kal
704-1072			EACH					/近/JEF	FREY D	1/2/
704-1080 704-1081		BLE VERTICAL PANELS L PANELS - BACK TO BACK	EACH EACH					the I	ALEY P	191
704-1085	SEQUEN	CING ARROW PANEL - TYPE A	EACH					1 A MARCH	E-7865	arey
704-1086		CING ARROW PANEL - TYPE B	EACH						<b>1000</b>	ES)
704-1087 704-1500		CING ARROW PANEL - TYPE C ATION OF PVMT MK	EACH SF						03/03/25	121
704-1500		LE PRECAST CONCRETE MED BARRIER	LF		$\neg$				03/03/25	
704-3510	PRECAS	T CONCRETE MED BARRIER - STATE FURNISHED	EACH					1 Ac		R/
762-0200 762-0420		PAVEMENT MARKERS	EACH LF					V.OR.	TH DAKO	/
762-0420		ERM 4IN LINE - TYPE R ERM 4IN LINE - TYPE NR	LF						- UNI	
						1	-	Traffic Control Devic	es List	
						1				
						1				
						1				
						1				
						1				
						1				



The sign layout as shown is for general information purposes only. The Contractor will be required to conform to MUTCD and the Standard Drawings when installing the traffic control signing.

BRIDGE	RETROFIT	SPAN LENGTH "L" (FT)	EXISTING NUMBER OF BEAMS (EA)	ADDITIONAL BEAMS REQUIRED (EA)	PROPOSED BEAM SPACING (IN)	MIDSPAN BRACE MEMBER SIZE	MAXIMUM GRAVEL DEPTH (IN)
34-101-05.1	Add midspan brace Replace steel pile caps	23.7'	15	N/A	22"	L2x2x1/4	5"
34-105-21.2	Add midspan brace Replace steel pile caps	28.9'	13	N/A	22"	L2x2x1/4	2"
34-105-21.3	Add midspan brace Replace steel pile caps Replace G3&G8 with new S12x31.8	21'	13	(2) S12x31.8	22"	L2x2x1/4	0"
34-105-29.0	Add midspan brace Replace G3&G12 with new W18x76 Replace steel pile caps Pile repairs	41'	13	(2) W18x76	27"	L2x2x1/4	4"
34-106-21.0	Add midspan brace Replace steel pile caps Add S12x31.8 beams Add timber curb Trim deck overhang	23'	13	(2) S12x31.8	20"	L2x2x1/4	7"
34-106-23.1	Add midspan brace Replace steel pile caps	23'	15	N/A	20"	L2x2x1/4	5"
34-108-30.0	Add midspan brace Replace steel pile caps Pile repairs Timber Pile Resistance Drilling	39'	13	N/A	22"	L2x2x1/4	4"
34-109-25.0	Add midspan brace Add S15x50 beams Replace steel pile caps Pile repairs	34.7'	13	(3) S15x50	18"	L2x2x1/4	2"
34-120-25.0	Add midspan brace Replace steel pile caps	23'	14	N/A	25"	L2x2x1/4	12"
34-121-04.0	Add midspan brace Add W12x26 beams Replace steel pile caps	25.8'	13	(4) W12x26	17"	L2x2x1/4	0"
34-123-12.0	Add midspan brace Replace steel pile caps Pile Repairs	20'	12	N/A	26"	L2x2x1/4	0"
34-125-27.0	Add midspan brace Replace steel pile caps Pile Repairs	23.2'	13	N/A	25"	L2x2x1/4	3"
34-126-07.0	Add midspan brace Replace steel pile caps	29.3'	15	N/A	23"	L2x2x1/4	0"
34-126-08.1	Add midspan brace Replace steel pile caps	30'	15	N/A	20"	L2x2x1/4	8"
34-127-05.0	Add midspan brace in Span 2 Add S12x31.8 beams in Span 2 Replace all steel pile caps	29'	13 (Span 1&3) 16 (Span 2)	(2) S12x31.8 Span 2	23" (Span 1&3) 16" (Span 2)	L2x2x1/4 (Span 2)	0"
34-128-16.0	Add midspan brace Replace steel pile caps	25'	15	N/A	20"	L2x2x1/4	0"
34-128-18.0	Add midspan brace Replace G4 with new S12x31.8 Replace steel pile caps	20,2'	13	(1) S12x31.8	23"	L2x2x1/4	0"

BRIDGE	BID I	TEMS
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SPEC	CODE	ITEM DESCRIPTION
616	0360	STRUCTURAL STEEL
930	9504	BRIDGE REPAIR
930	9650	ABUTMENT REPAIR

#### NOTES:

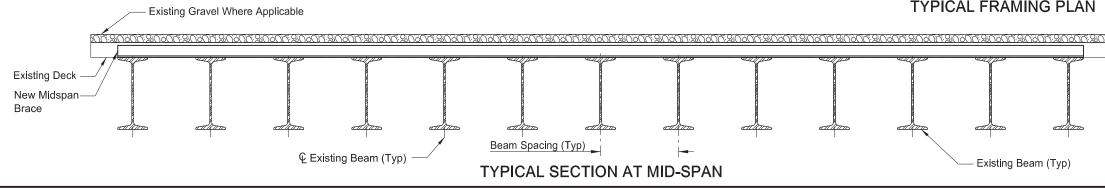
Jse Struct the new st midspan

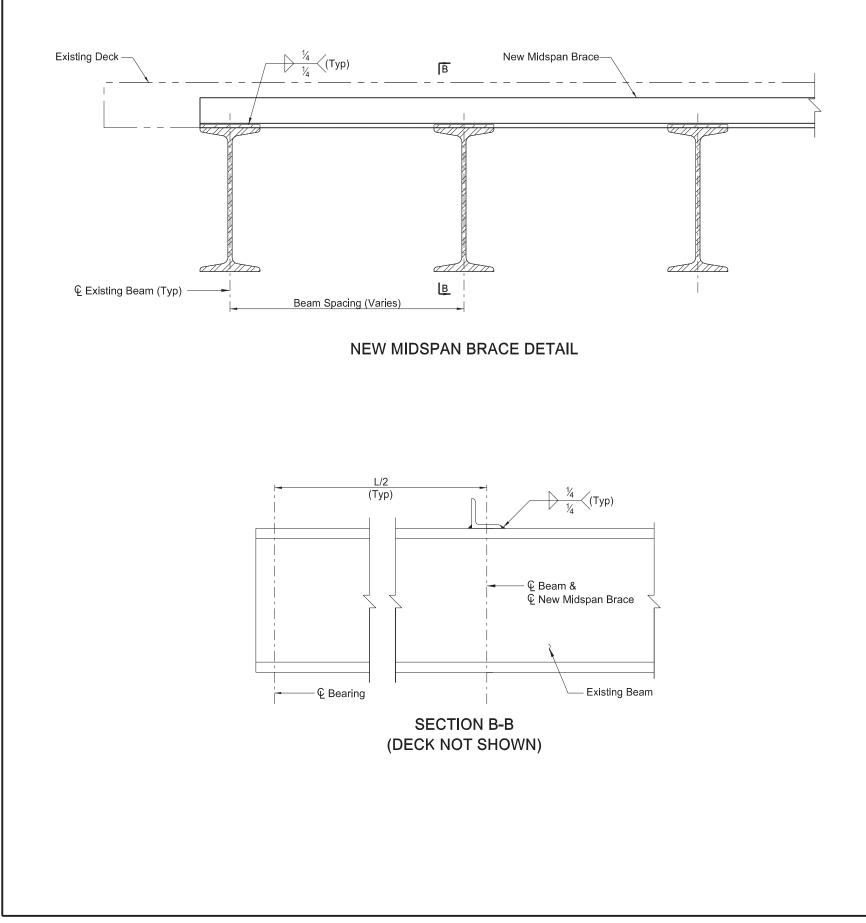
Jse Type

Include all Additional

Include all

				STATE	PROJECT NUME		SECTION NO.	SHEET NO.
				ND	BRP-0034(0	)35)	170	1
	BRIDGE BID I	TEMS						
CODE	ITEM DESCRIPTION		UNI	r qu	ANTITY			
0360	STRUCTURAL STEEL		LBS		77,739			
9504 9650	BRIDGE REPAIR ABUTMENT REPAIR		L SU SF	JM	1 195			
teel caps braces. A	el meeting the requirements of AASHTO s, midspan braces and additional beams i spproximately 18,758 lbs will be required	n the unit pri	ce bid for "Structural	Steel". A	pproximately 1,324 lbs wil	l be required for	r the new	
3 F3125	Grade A325 7/8" dia. bolts.							
	ssociated with repairing and performing r airs may be required as directed by the E						Repair".	
							"Deleter a Date	- 1
COSIS A	ssociated with removing corrugated deck	and lumishi	ng and installing the		shage 34-106-21.0 in the t	init price bid for	впаде кер	ar.
-	L/2		L/2					
-								
			New Midspan E	Brace	1			
<b>-</b>	€ Bearing			€ Beari				
1								
 						OR	FESSION	
 						all V	VADE M.	F
1	Existing Beam (Typ)					DATE DATE	OMPSON E-10777	ENGINEER
					1	0	TAI	NE
	TYPICAL	FRAMIN	G PLAN			DATE	hop	15
							3/03/25	/ /
0608700	70603270603270603270603270603270	00:2:000	<u>60:\$`ñ0;0;0;2;ñ0</u>			NORT	HDAKOT	
						DD 0034/035		
					E PEMBII	RP-0034(035)	AKOTA	
THE THE	at the set of the set	THE REAL PROPERTY OF	at little		<u>//</u> KL]	BRID	GE LAYOU	JT
	E	Existing Bear	n (Typ)					
		<b>.</b>				DRWN. BY BJJ	CCA	2202-00406
								© KLJ 20





STATE	PROJECT NUMBER	٦	SECTION	SHEET
ND	BRP-0034(03		NO.	NO. 2
	BR	DATE 03 P-0034(035) COUNTY, NORTH DAM	DFESSION VADE M. OMPSON E-10777 /03/25 // DAKO	AT ENGINEER
	≪ <sup>KLJ</sup>	D	ETAILS	ојест NO. 2202-00406 © KLJ 2024

