

Plot Scale - 1:1000

Plotted From - jfreihammer

Plot Date - 4/16/2026

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT IM 0901(198)32
INTERSTATE 90
MEADE COUNTY

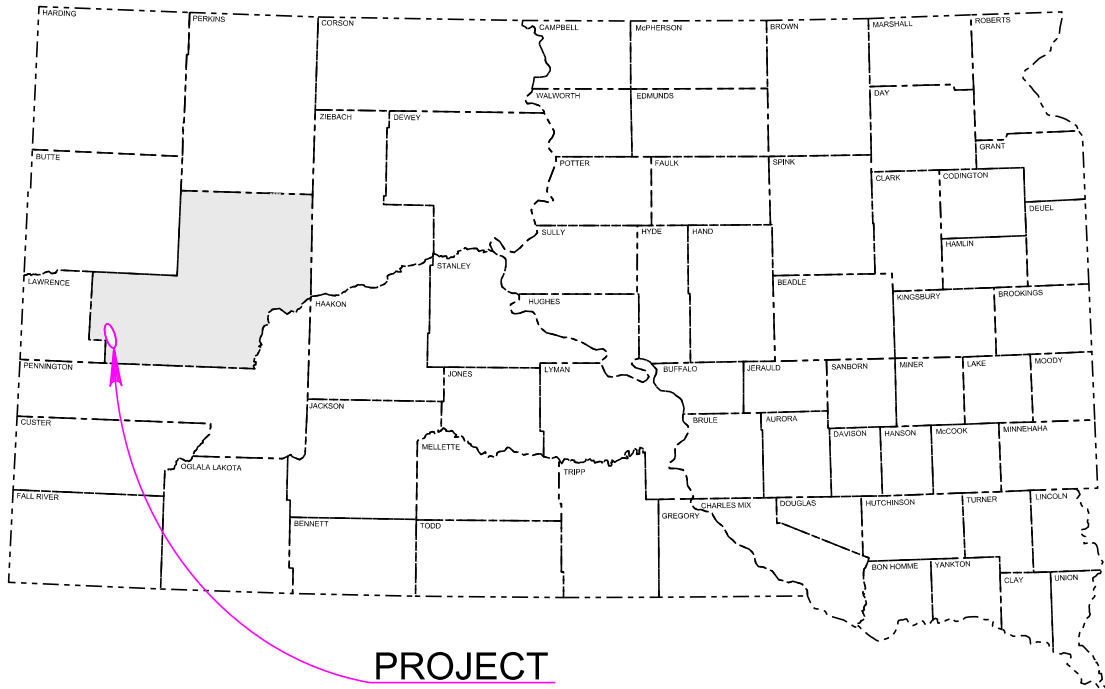
Pre-purchase Concrete Pipe
PCN 0A99

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0901(198)32	1	4

Plotting Date: 4/16/2026

INDEX OF SECTIONS

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Sheet 3 to 4	Standard Plates



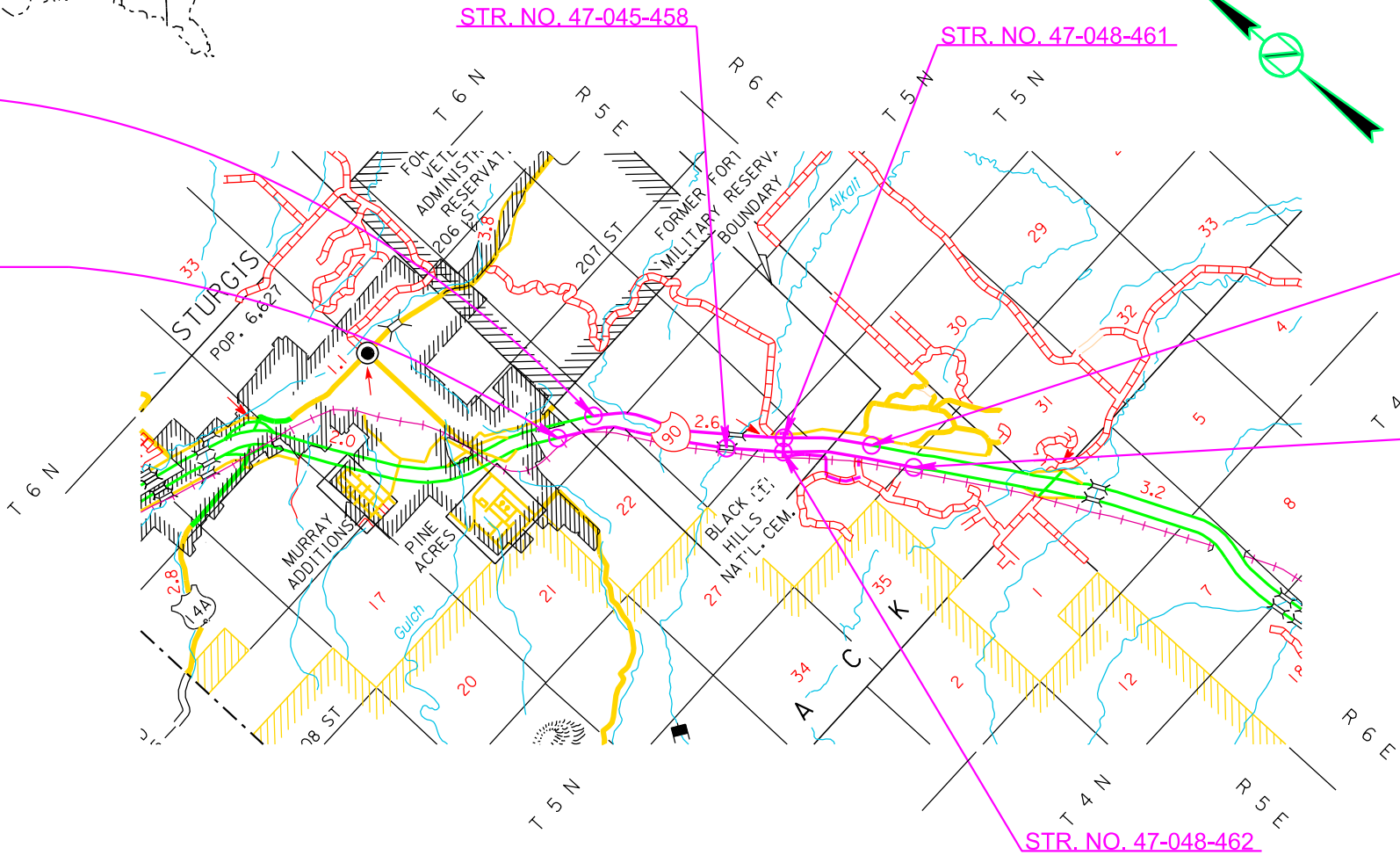
PROJECT

BEGIN IM 0901(198)32

Station 1000+00.00 I-90 Westbound
Approximately 1095.58' South and
824.03' East of Center of Section 15 -
Township 5 North - Range 5 East
MRM 32.82 + 0.199

BEGIN IM 0901(198)32

Station 0+00.00 I-90 Eastbound
Approximately 888.15' South and
399.74' East of Center of Section 15 -
Township 5 North - Range 5 East
MRM 32.99 + 0.086



END IM 0901(198)32

Station 1136+37.07 I-90 Westbound
Approximately 1315.43' South and
1348.80' East of Center of Section 25 -
Township 5 North - Range 5 East
MRM 35.04 + 0.475

END IM 0901(198)32

Station 170+40.92 I-90 Eastbound
Approximately 1137.77' South and
272.39' East of N Corner of Section 36 -
Township 5 North - Range 5 East
MRM 36.00 + 0.095

Plans Prepared By
Minneapolis Office
733 Marquette Avenue,
Suite 1000
Minneapolis, MN 55402
Phone: 612-712-2000
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ESTIMATE OF QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0901(198)32	2	4

Revised Date: 10/22/2026 JRF

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
450E0282	96" RCP Class 2, Furnish	192	Ft
450E0303	108" RCP Class 3, Furnish	24	Ft
450E0304	108" RCP Class 4, Furnish	32	Ft
450E0305	108" RCP Class 5, Furnish	154	Ft
450E2250	96" RCP Sectional End, Furnish	4	Each
450E2254	108" RCP Sectional End, Furnish	1	Each

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2026 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.

DELIVERY OF CONCRETE PIPE MATERIALS

The Contractor will have the pipe ready for delivery by August 16, 2027, and plan to store the pipe until October 15, 2027, at the latest. All concrete pipe materials will be delivered to the job site (I-90 exit 34, Pleasant Valley Drive). The Contractor for PCN 06DN will be responsible for unloading the materials. The contact person regarding delivery arrangements is Steve Palmer, Rapid City Area Engineering Supervisor, 605-394-1636.

Loaded trucks will be required to remain on the Interstate system via Exit 34 to reach the unloading point. The Contractor will not use Pleasant Valley Drive via Exit 37.

All costs involved with the transportation of the concrete pipe materials to the job site will be included in the contract price per foot of (Size)" RCP Class (#), Furnish and (Size)" RCP Sectional End, Furnish.

TAX LIABILITY

The South Dakota Department of Transportation (SDDOT) is a South Dakota sales tax-exempt government entity. Therefore, a Certificate of Exemption will be provided to the successful bidding party which excuses the party from paying sales tax on the materials being furnished to the SDDOT. It is the responsibility of bidding parties to contact SD Department of Revenue at 1-800-829-9188 to determine tax licensure requirements. A south Dakota Contractor Excise Tax License is not required for this pre-purchase contract as it is not considered a reality improvement.

REINFORCED CONCRETE PIPE

High sulfate levels are likely to be encountered on this project. The type of cement will be either a Type II or a Type V with 20% to 25% Class F Modified Fly Ash substituted for cement in accordance with Section 605 of the Specifications. The Water/Cementitious material ratio will not exceed 0.45 as defined in Section 460.3 C of the Specifications. The mix will be as per the fabricator's design; however, minimum compressive strength will not be less than 4500 psi at 28 days. The pipe must be marked in an acceptable way to designate meeting requirements for sulfate resistance.



1:200
Plot Scale -

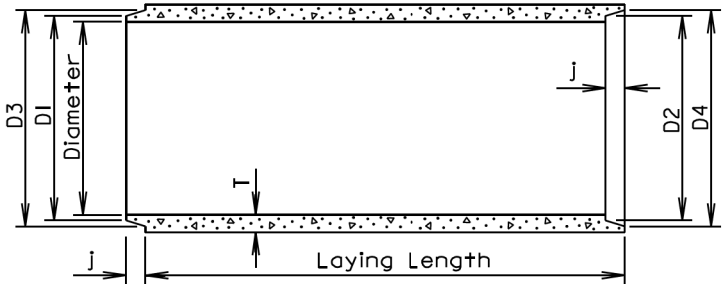
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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0901(198)32	3	4

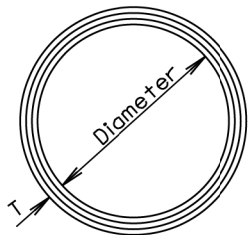
Plotting Date: 10/22/2026 Revised Date: 10/22/2026 JRF

TOLERANCES IN DIMENSIONS

Diameter: $\pm 1.5\%$ for 24" Dia. or less and $\pm 1\%$ or $\frac{3}{8}"$ whichever is more for 27" Dia. or greater.
Diameters at joints: $\pm \frac{3}{16}"$ for 30" Dia. or less and $\pm \frac{1}{4}"$ for 36" or greater.
Length of joint (J): $\pm \frac{1}{4}"$.
Wall thickness (T): not less than design T by more than 5% or $\frac{3}{16}"$, whichever is greater.
Laying length: shall not underrun by more than $\frac{1}{2}"$.



LONGITUDINAL SECTION
(* Tongue and Groove Style Shown)



END VIEW

GENERAL NOTES:

Construction of R.C.P. shall conform to the requirements of Section 990 of the Specifications.

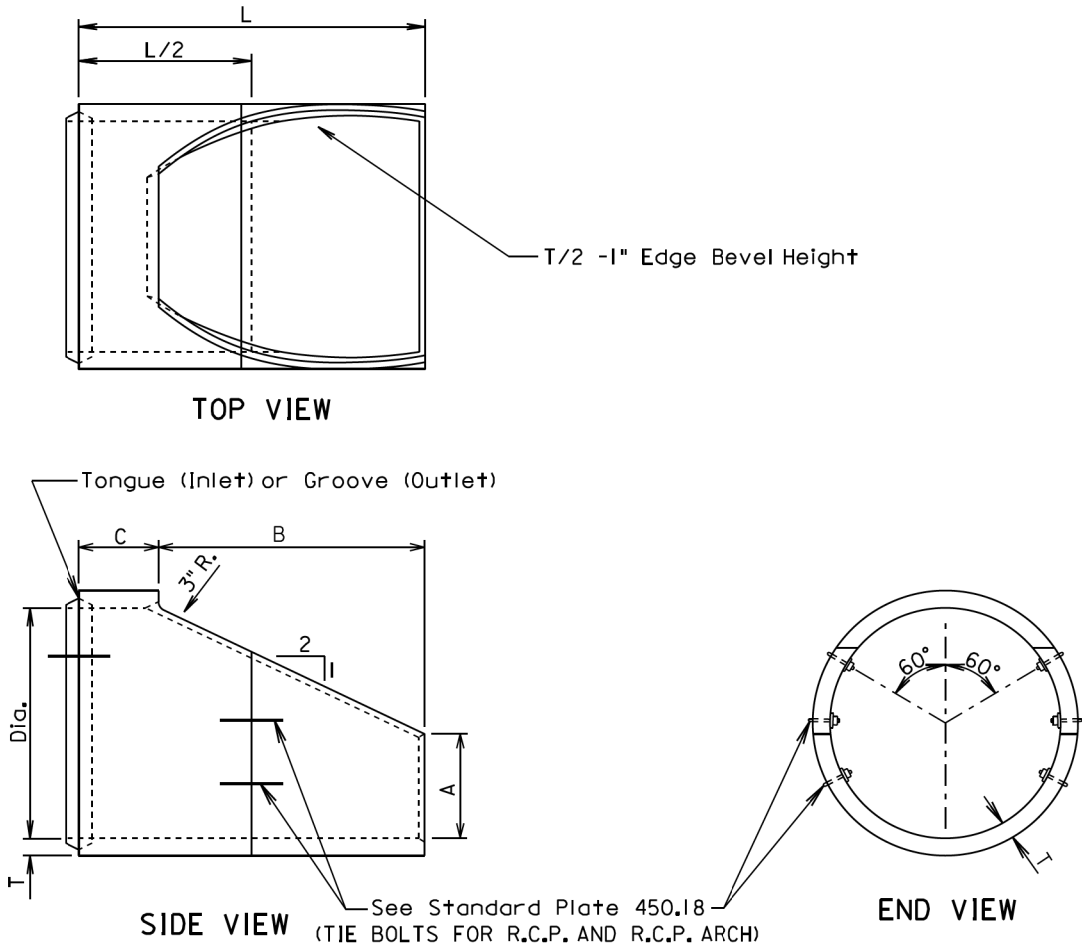
Not more than 2 four-foot sections shall be permitted near the ends of any culvert. Four-foot lengths shall be used only to secure the required length of culvert.

* Unless otherwise specified in the plans, the RCP may be either tongue and groove or bell and spigot style.

Diam. (in.)	Approx. Wt. /Ft. (lb.)	T (in.)	J (in.)	D1 (in.)	D2 (in.)	D3 (in.)	D4 (in.)
12	92	2	1 3/4	13 1/4	13 5/8	13 7/8	14 1/4
15	127	2 1/4	2	16 1/2	16 7/8	17 1/4	17 5/8
18	168	2 1/2	2 1/4	19 5/8	20	20 3/8	20 3/4
21	214	2 3/4	2 1/2	22 7/8	23 1/4	23 3/4	24 1/8
24	265	3	2 3/4	26	26 3/8	27	27 3/8
27	322	3 1/4	3	29 1/4	29 5/8	30 1/4	30 5/8
30	384	3 1/2	3 1/4	32 3/8	32 3/4	33 1/2	33 7/8
36	524	4	3 3/4	38 3/4	39 1/4	40	40 1/2
42	685	4 1/2	4	45 1/8	45 5/8	46 1/2	47
48	867	5	4 1/2	51 1/2	52	53	53 1/2
54	1070	5 1/2	4 1/2	57 7/8	58 3/8	59 3/8	59 7/8
60	1296	6	5	64 1/4	64 3/4	66	66 1/2
66	1542	6 1/2	5 1/2	70 5/8	71 1/8	72 1/2	73
72	1810	7	6	77	77 1/2	79	79 1/2
78	2098	7 1/2	6 1/2	83 3/8	83 7/8	85 5/8	86 1/8
84	2410	8	7	89 3/4	90 1/4	92 1/8	92 5/8
90	2740	8 1/2	7	95 3/4	96 1/4	98 1/8	98 5/8
96	2950	9	7	102 1/8	102 5/8	104 1/2	105
102	3075	9 1/2	7 1/2	109	109 1/2	111 1/2	112
108	3870	10	7 1/2	115 1/2	116	118	118 1/2

April 17, 2026

<i>Published Date: 2027</i>	S D D O T	REINFORCED CONCRETE PIPE	PLATE NUMBER 450.01
			Sheet 1 of 1



Dia. (in.)	T (in.)	L (ft.)	INLET END			OUTLET END		
			A (in.)	B (in.)	C (in.)	A (in.)	B (in.)	C (in.)
96	9	12	42	104	40	44	99	45
108	10	16	42	128	64	44	123	69
120	11	16	42	152	40	44	147	45

GENERAL NOTES:

Construction of R.C.P. Sectional Ends shall conform to the requirements of Section 990 of the Specifications.

Reinforcement per Class 2 RCP with double reinforcement in the upper 120 degrees of the full barrel portion.

Lengths of concrete pipe shown on plan sheets are between sectional ends only.

June 26, 2015

<i>Published Date: 2027</i>	S D D O T	R. C. P. SECTIONAL ENDS	PLATE NUMBER 450.16
			Sheet 1 of 1

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Plot Scale - 1:200

Plotted From - ifirehammer

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0901(198)32	4	4

Plotting Date: 10/22/2026 Revised Date: 10/22/2026 JRF

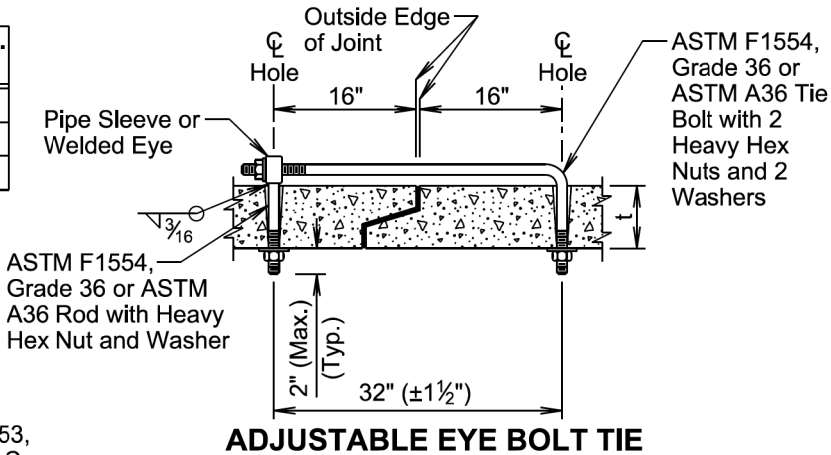
Wall "t" (in.)	Rod Dia. (in.)	Pipe Sleeve Dia. (nominal)
≤ 3¼	5⁄8	¾
3½-6½	¾	1
≥ 7	1	1¼

GENERAL NOTES:

Tie bolts will conform to ASTM F1554, Grade 36 or ASTM A36. Nuts will be heavy hex conforming to ASTM A563. Washers will conform to ASTM F436.

Pipe Sleeve will conform to ASTM A53, Grade B or ASTM A500, Grade B or C.

Galvanize adjustable eye bolt tie assembly in accordance with ASTM A153.



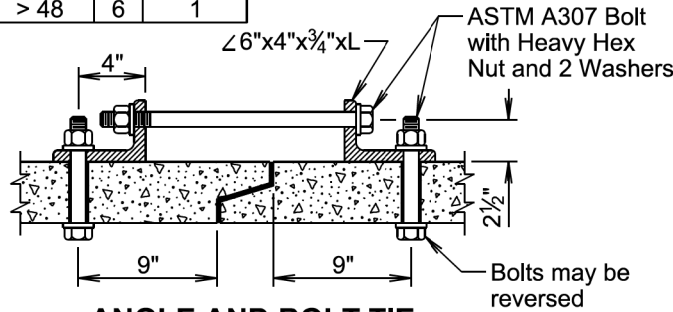
Pipe Dia. (in.)	"L" (in.)	Bolt Dia. (in.)
≤ 48	4	¾
> 48	6	1

GENERAL NOTES:

Angles will conform to ASTM A36.

Bolts will conform to ASTM A307. Nuts will be heavy hex conforming to ASTM A563. Washers will conform to ASTM F436.

Galvanize angles, bolts, nuts, and washers in accordance with ASTM A153.



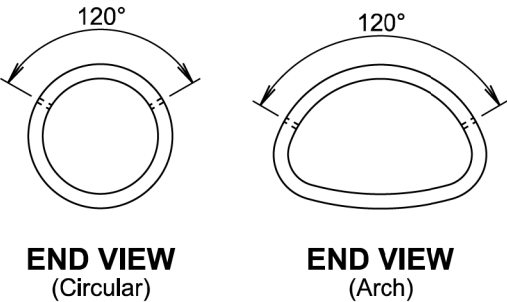
ANGLE AND BOLT TIE

GENERAL NOTES:

In lieu of the tie bolts detailed above other types of tie bolt connections may be installed as approved by the Office of Bridge Design.

All pipe sections of R.C.P. and R.C.P. Arch will be tied with tie bolts except for pipe located between drop inlets, manholes, and junction boxes. All pipe sections of pipes that only enter or exit drop inlets, manholes, and junction boxes will be tied with tie bolts.

There will be no separate measurement or payment for the tie bolts. The cost for furnishing and installing the tie bolts will be incidental to the contract unit price per foot for the corresponding bid item for R.C.P. or R.C.P. Arch.



Published Date: 2027

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TIE BOLTS FOR R.C.P. AND R.C.P. ARCH

PLATE NUMBER
450.18

Sheet 1 of 1

April 8, 2025

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