

SECTION D: EROSION AND SEDIMENT CONTROL PLANS

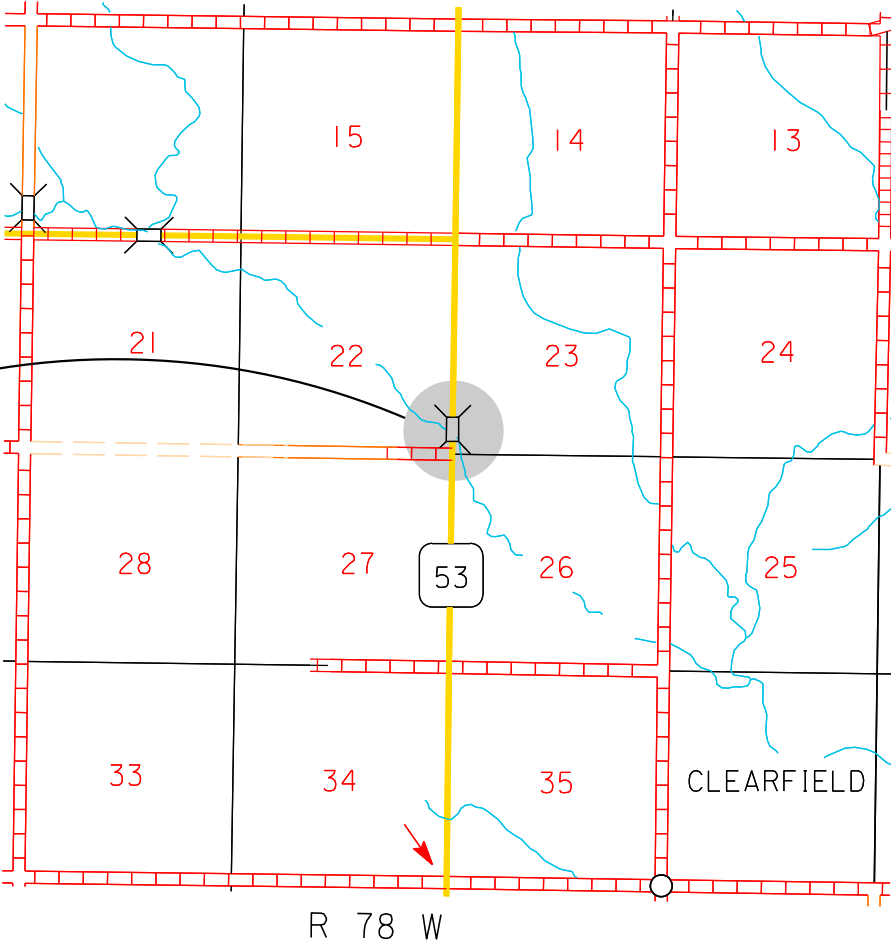
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 0053(12)14 & P 0047(126)60	D1	D3

Plotting Date: 09/17/2025

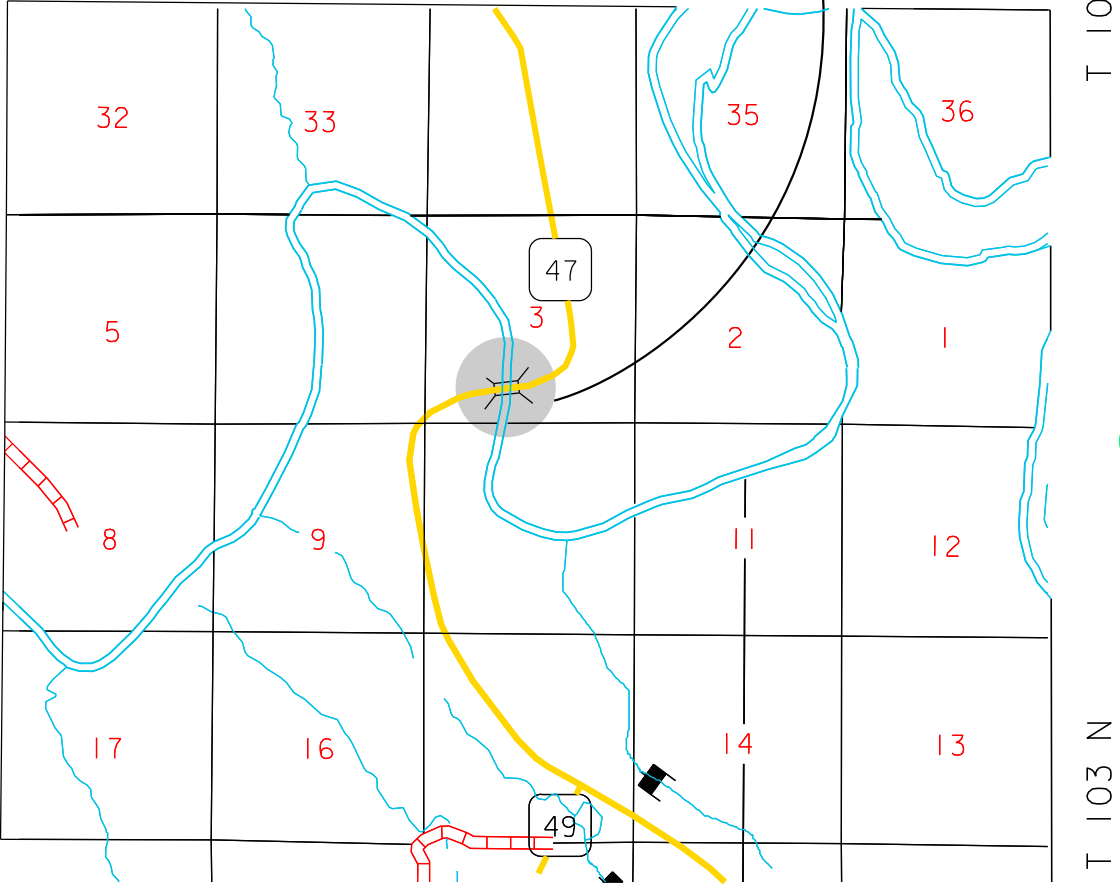
INDEX OF SHEETS

D1	General Layouts with Index
D2	Estimate & Plan Notes
D3	Standard Plates

PROJECT P 0053(12)14 PCN 090U
Structure No. 62-100-399
5-Span - Continuous Concrete Bridge
over Willow Creek at MRM 14.09



PROJECT P 0047(126)60 PCN 09LF
Structure No. 43-403-308
5-Span Composite Plate Girder Bridge
over White River at MRM 60.44



ESTIMATE OF QUANTITIES

PCN 09LF – SD47

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	17.4	CuYd
230E0100	Remove and Replace Topsoil	Lump Sum	LS
734E0010	Erosion Control	Lump Sum	LS
734E0154	12" Diameter Erosion Control Wattle	250	Ft
734E0165	Remove and Reset Erosion Control Wattle	63	Ft

REMOVE AND REPLACE TOPSOIL

Prior to beginning guardrail embankment reconstruction, a 4” depth of topsoil will be removed or bladed down the respective inslopes and left in a windrow at the toe of the inslope. Following completion of construction, topsoil will be spread evenly over the disturbed areas.

The estimated amount of topsoil to be removed and replaced is **196** CuYd.

All costs associated with removing and replacing the topsoil will be incidental to the contract lump sum price for “Remove and Replace Topsoil”.

EROSION CONTROL

The erosion control areas will consist of all disturbed areas for the reconstructed and newly graded guardrail embankments. The limits of erosion control work will be determined by the Engineer during construction.

The estimated disturbance for the project is **0.728** acres.

All costs for the erosion control work for furnishing, placing, and maintaining erosion control including equipment, labor, seeding, inoculum, and mulching will be incidental to the contract lump sum price for “Erosion Control”.

Permanent Seeding

Type C Permanent Seed Mixture will consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/Acre)
Western Wheatgrass	Arriba, Flintlock, Rodan, Rosana, Walsh	16
Canada Wildrye	Mandan	2
Total:		18

Mycorrhizal Inoculum

Mycorrhizal inoculum will consist of mycorrhizal fungi spores and mycorrhizal fungi-infected root fragments in a solid carrier. The carrier may include organic materials, calcinated clay, or other materials consistent with application and good plant growth. The supplier will provide certification of the fungal species claimed and the live propagule count. The inoculum will include a minimum 25% the fungal species *Rhizophagus intraradices*. The remaining 75% may include other endomycorrhizal fungal species.

All seed will be inoculated by the seed supplier with a minimum of 100,000 live propagules of mycorrhizal fungi per acre. All costs of inoculating the seed will be incidental to the contract unit price per pound for the corresponding permanent seed mixture.

The Mycorrhizal Inoculum provided will be from the approved product list. The approved product list may be viewed at the following internet site:

<https://apps.sd.gov/HC60ApprovedProducts/main.aspx>

Fertilizing

Application of fertilizer will not be required on this project.

Fiber Mulching

Fiber mulch will be applied in a separate operation following permanent seeding.

The Contractor will allow the fiber mulch to cure a minimum of 18 hours prior to watering or any storm event to ensure proper cohesion between the soil and fiber particles.

The fiber mulch provided will be from the approved product list. The approved product list for fiber mulch may be viewed at the following internet site:

<http://apps.sd.gov/HC60ApprovedProducts/main.aspx>

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 0053(12)14 & P 0047(126)60	D2	D3

EROSION CONTROL WATTLE

Erosion control wattles for restraining the flow of runoff and sediment will be installed at locations noted in the table and at locations determined by the Engineer during construction. Refer to Standard Plate 734.06 for details.

The Contractor will provide certification that the erosion control wattles do not contain noxious weed seeds.

Erosion control wattles will remain on the project to decompose.

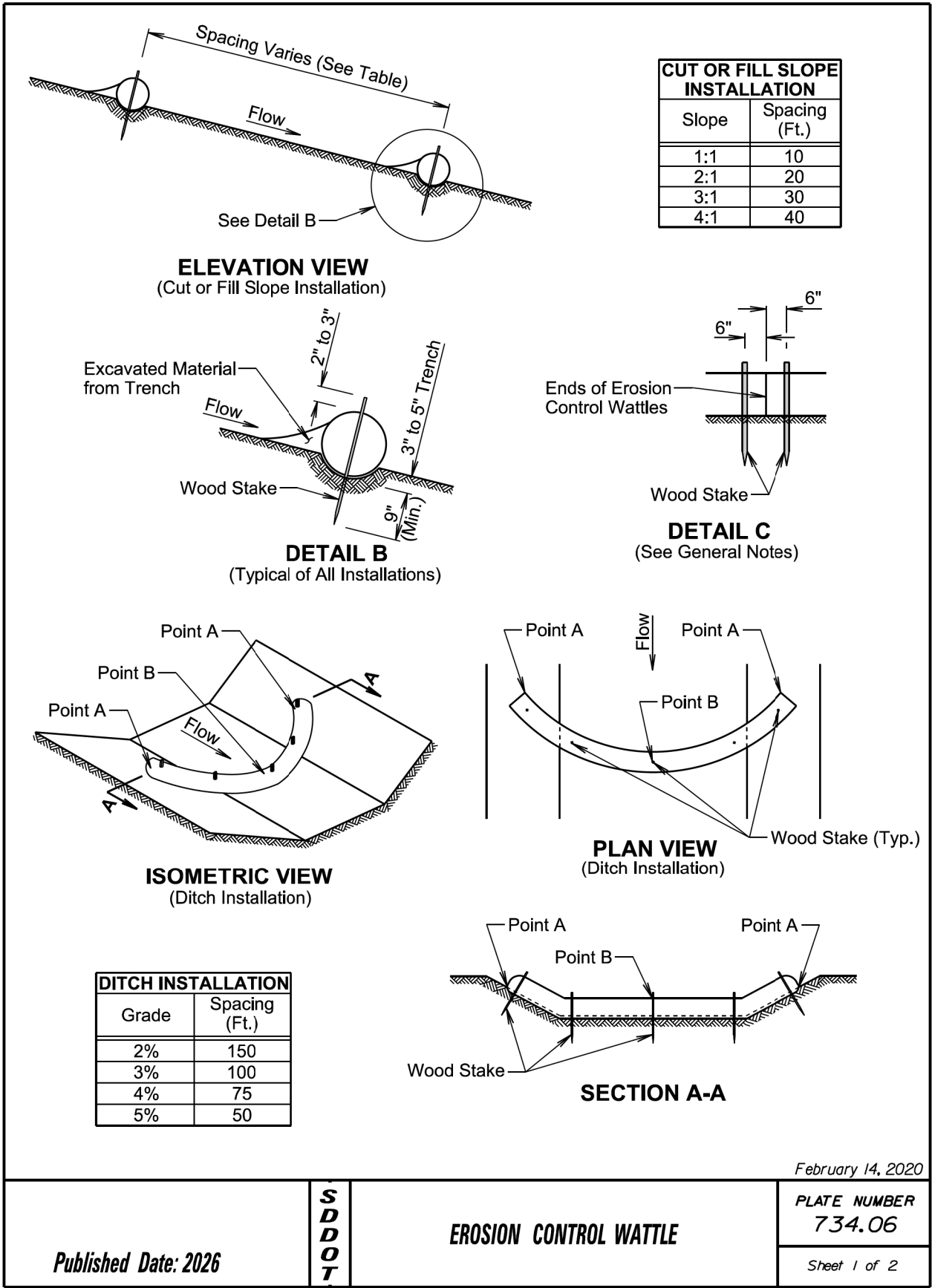
An additional quantity of 12” Diameter Erosion Control Wattles has been added to the Estimate of Quantities for temporary erosion and sediment control as directed by the Engineer during construction.

The erosion control wattle provided will be from the approved product list. The approved product list for erosion control wattle may be viewed at the following internet site:

<http://apps.sd.gov/HC60ApprovedProducts/main.aspx>

Table of Erosion Control Wattle

Site Locations	Location	Diameter (Inch)	Quantity (Ft)
Guardrail Embankment	Thru Ditch Bottoms (50’ Each End @ Str.)	12	200
	Additional Quantity:	12	50
	Total:		250



GENERAL NOTES:

At cut or fill slope installations, wattles will be installed along the contour and perpendicular to the water flow.

At ditch installations, point A must be higher than point B to ensure that water flows over the wattle and not around the ends.

The Contractor will dig a 3" to 5" trench, install the wattle tightly in the trench so that daylight can not be seen under the wattle, and then compact the soil excavated from the trench against the wattle on the uphill side. See Detail B.

The stakes will be 1"x2" or 2"x2" wood stakes, however, other types of stakes such as rebar may be used only if approved by the Engineer. The stakes will be placed 6" from the ends of the wattles and the spacing of the stakes along the wattles will be 3' to 4'.

Where installing running lengths of wattles, the Contractor will butt the second wattle tightly against the first and will not overlap the ends. See Detail C.

The Contractor and Engineer will inspect the erosion control wattles in accordance with the storm water permit. The Contractor will remove, dispose, or reshape the accumulated sediment when necessary as determined by the Engineer.

Sediment removal, disposal, or necessary shaping will be as directed by the Engineer. All costs for removing accumulated sediment, disposal of sediment, and necessary shaping will be incidental to the contract unit price per cubic yard for "Remove Sediment".

All costs for furnishing and installing the erosion control wattles including labor, equipment, and materials will be incidental to the contract unit price per foot for the corresponding erosion control wattle contract item.

All costs for removing the erosion control wattle from the project including labor, equipment, and materials will be incidental to the contract unit price per foot for "Remove Erosion Control Wattle".

February 14, 2020

Published Date: 2026

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EROSION CONTROL WATTLE

PLATE NUMBER
734.06

Sheet 2 of 2