

STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED **PROJECT** NH-CR 0081(122)3 P 0046(87)334 HIGHWAY 81 HIGHWAY 46

AC Resurfacing, PCC Surfacing, AC Surfacing, Mill, AC Resurfacing of Shoulders PCN 07V2.09P4

ਤੋਂ T96 N

46

BEGIN P 0046(87)334

MRM 334.00+0.363

Begin Shoulder Surfacing

Sta. 6+16.5

Str. No. 68-120-177 -

MRM 13.66

PROJECT TOTAL SHEETS SHEET STATE OF NH-CR 0081(122)3 127 DAKOTA 1 & P 0046(87)334

Plotting Date: 09/13/2024

INDEX OF SECTIONS

Section A: Estimate of Quantities and Environmental Commitments

Section C: Traffic Control Plans Section D: Erosion and Sediment

Control Plans Section F: Surfacing Plans

Section M: Pavement Marking Plans

Section X: Cross Sections

DESIGN DESIGNATION (07V2)

| ADT (2022) ADT (2042) | 3664 5511 |
|--------------------------|--------------|
| DHV | 636 |
| 2 | 51% |
| D | O |
| T DHV | 6.9% |
| T ADT | 15.2% |
| V | 65 MPH |

DESIGN DESIGNATION (09P4)

| ADT (2022) ADT (2042) | 995 1496 |
|--------------------------|-------------|
| DHV | 173 |
| D | 51% |
| T DHV | 5.6% |
| T ADT | 12.2% |
| V | 65 MPH |

STORM WATER PERMIT 07V2

MAJOR STREAM - Tributaries to: James River

ACRES DISTURBED - 34 Acres PROJECT AREA - 249 Acres LATITUDE = 43.6789 (Google Maps)

LONGITUDE = -97.3620 (Google Maps)

STORM WATER PERMIT 09P4

BEGIN NH 0081(122)03

Begin Shoulder Surfacing

MRM 3.53+0.038 NBL

MRM 3,53+0,040 SBL

Sta. a 114+02

MAJOR STREAM - Tributaries to: James River

438 AVE

ACRES DISTURBED - I Acre PROJECT AREA - 4 Acres LATITUDE = 43.0826 (Google Maps) LONGITUDE = -97.4028 (Google Maps)

PCN 07V2

GROSS LENGTH 46,346.34 FEET 8.778 MILES LENGTH OF BRIDGES 416.83 FEET 0.079 MILES NET LENGTH 45.929.51 FEET 8.699 MILES

PCN 09P4

NET LENGTH 1.007.5 FEET 0.191 MILES

GROSS LENGTH 1,007.5 FEET 0.191 MILES LENGTH OF BRIDGES 0.00 FEET 0.000 MILES

END NH 0081(122)03

January 22, 2025

EQUATION Sta. 208+10 Sta. 348+95.12 **End Shoulder Surfacing** Sta. a 219+14.50 Bk End Surfacing END P 0046(87)334 Begin Shoulder Surfacing MRM 15.34 +0.153 End Shoulder Surfacing = MRM 9.37 +0.432 Sta. 16+24 MŘM 12.36 +0.109 Sta. 10+05 **End Shoulder Surfacing Begin Surfacing** MRM 334.58+0.00

EXCEPTION

Sta. 348+95.12

Str. No. 68-120-139

T 95 N

MRM 7.43

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

| STATE OF | PROJECT | SHEET | TOTAL SHEETS |
|-----------------|-------------------------------------|-------|-----------------|
| SOUTH DAKOTA | NH-CR 0081(122)3 & P 0046(87)334 | A1 | A3 |

Section C - Traffic Control

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|------------------------------------|----------|------|
| 110E5020 | Salvage Traffic Sign | 8 | Each |
| 110E7150 | Remove Sign for Reset | 25 | Each |
| 110E7152 | Remove Delineator for Reset | 80 | Each |
| 260E1010 | Base Course | 500.0 | Ton |
| 632E2100 | Reset Delineator | 80 | Each |
| 632E3500 | Reset Sign | 25 | Each |
| 634E0010 | Flagging | 350.0 | Hour |
| 634E0020 | Pilot Car | 150.0 | Hour |
| 634E0110 | Traffic Control Signs | 982.0 | SqFt |
| 634E0120 | Traffic Control, Miscellaneous | Lump Sum | LS |
| 634E0135 | Traffic Control Supervisor | Lump Sum | LS |
| 634E0275 | Type 3 Barricade | 30 | Each |
| 634E0340 | Temporary Raised Pavement Markers | 31.5 | Mile |
| 634E0380 | Tubular Marker | 300 | Each |
| 634E0420 | Type C Advance Warning Arrow Board | 2 | Each |
| 634E0640 | Temporary Pavement Marking | 6,500 | Ft |
| 634E1002 | Detour and Restriction Signing | 947.0 | SqFt |

Section D - Erosion and Sediment Control

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|---|----------|------|
| 110E1690 | Remove Sediment | 6.5 | CuYd |
| 110E1693 | Remove Erosion Control Wattle | 700 | Ft |
| 110E1700 | Remove Silt Fence | 950 | Ft |
| 230E0100 | Remove and Replace Topsoil | Lump Sum | LS |
| 730E0100 | Cover Crop Seeding | 2.0 | Bu |
| 730E0212 | Type G Permanent Seed Mixture | 59 | Lb |
| 731E0200 | Fertilizing | 1.10 | Ton |
| 732E0100 | Mulching | 3.6 | Ton |
| 734E0044 | Soil Stabilizer | 0.5 | Acre |
| 734E0103 | Type 3 Erosion Control Blanket | 2,429 | SqYd |
| 734E0154 | 12" Diameter Erosion Control Wattle | 2,800 | Ft |
| 734E0165 | Remove and Reset Erosion Control Wattle | 700 | Ft |
| 734E0602 | Low Flow Silt Fence | 2,800 | Ft |
| 734E0604 | High Flow Silt Fence | 1,000 | Ft |
| 734E0610 | Mucking Silt Fence | 264 | CuYd |
| 734E0620 | Repair Silt Fence | 950 | Ft |
| 900E1320 | Construction Entrance | 2 | Each |

Section F - Surfacing

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--|----------|------|
| 004E0050 | Remove Traffic Diversion(s) | Lump Sum | LS |
| 009E0010 | Mobilization | Lump Sum | LS |
| 009E1350 | Restoration of Stockpile Site | Lump Sum | LS |
| 009E3210 | Construction Staking | 7.004 | Mile |
| 009E3301 | Engineer Directed Surveying/Staking | 40.0 | Hour |
| 009E3320 | Checker | Lump Sum | LS |
| 009E4200 | Construction Schedule, Category II | Lump Sum | LS |
| 110E0655 | Remove Interim Crossover Closure | 160 | Ft |
| 110E0730 | Remove Beam Guardrail | 350.0 | Ft |
| 110E0800 | Remove W Beam Guardrail End Terminal | 4 | Each |
| 110E1010 | Remove Asphalt Concrete Pavement | 191.0 | SqYd |
| 110E6410 | Remove Type 1 MGS for Reset | 600.0 | Ft |
| 110E6500 | Remove Type 1 Guardrail Transition for Reset | 4 | Each |
| 110E6619 | Remove MGS MASH Tangent End Terminal for Reset | 4 | Each |
| 120E0010 | Unclassified Excavation | 181 | CuYd |
| 120E0100 | Unclassified Excavation, Digouts | 128 | CuYd |
| 120E0600 | Contractor Furnished Borrow | 1,029 | CuYd |
| 120E6200 | Water for Granular Material | 579.1 | MGal |
| 210E0100 | Shoulder Clearing | 10.2 | Mile |
| 210E1000 | Shoulder Preparation | 1.000 | Mile |
| 210E1005 | Surface Preparation | 7.500 | Mile |
| 210E2000 | Shoulder Shaping | 7.500 | Mile |
| 260E1010 | Base Course | 4,799.2 | Ton |
| 260E1030 | Base Course, Salvaged | 14,140.3 | Ton |
| 260E2010 | Gravel Cushion | 7,500.0 | Ton |
| 260E6000 | Granular Material, Furnish | 8,971.0 | Ton |
| 270E0020 | Salvage and Stockpile Asphalt Mix Material | 2,716.0 | Ton |
| 270E0110 | Salvage and Stockpile Granular Material | 14,140.3 | Ton |
| 270E0220 | Blend and Stockpile Granular Material | 17,942.0 | Ton |
| 270E0230 | Haul and Stockpile Asphalt Mix Material | 3,861.4 | Ton |
| 320E0005 | PG 58-34 Asphalt Binder | 642.1 | Ton |
| 320E1070 | Class HR Asphalt Concrete | 18,317.1 | Ton |
| 320E1200 | Asphalt Concrete Composite | 370.0 | Ton |
| 320E3000 | Compaction Sample | 6 | Each |
| 320E5010 | Saw and Seal Shoulder Joint | 119,344 | Ft |
| 320E7012 | Grind 12" Rumble Strip or Stripe in Asphalt Concrete | 6.9 | Mile |
| 320E7028 | Grind Centerline Rumble Stripe in Asphalt Concrete | 0.2 | Mile |
| 330E0010 | MC-70 Asphalt for Prime | 96.9 | Ton |
| 330E0100 | SS-1h or CSS-1h Asphalt for Tack | 39.9 | Ton |
| 330E0210 | SS-1h or CSS-1h Asphalt for Flush Seal | 23.9 | Ton |
| 330E1000 | Blotting Sand for Prime | 81.6 | Ton |
| 330E2000 | Sand for Flush Seal | 57.3 | Ton |
| 332E0010 | Cold Milling Asphalt Concrete | 44,039 | SqYd |

INDEX OF SHEETS

REVISED 21 January, 2025 - BAH

A1 Estimate of Quantities for PCN 07V2 Sections C, D, F, & M
A2 Estimate of Quantities for PCN 09P4 Sections C, F & M
A2 to A3 Environmental Commitments

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--------------------------------------|-----------|------|
| 380E0050 | 8" Nonreinforced PCC Pavement | 112,186.2 | SqYd |
| 380E5010 | Fast Track Concrete | 1,500.0 | SqYd |
| 380E6000 | Dowel Bar | 73,036 | Each |
| 380E6110 | Insert Steel Bar in PCC Pavement | 34 | Each |
| 410E2600 | Membrane Sealant Expansion Joint | 104.0 | Ft |
| 600E0300 | Type III Field Laboratory | 1 | Each |
| 630E0500 | Type 1 MGS | 387.5 | Ft |
| 630E1501 | Type 1 Retrofit Guardrail Transition | 2 | Each |
| 630E1510 | Type 3 Guardrail Transition | 2 | Each |
| 630E2018 | MGS MASH Tangent End Terminal | 4 | Each |
| 630E5010 | Reset Type 1 MGS | 600.0 | Ft |
| 630E5204 | Reset MGS MASH Tangent End Terminal | 4 | Each |
| 630E5300 | Reset Type 1 Guardrail Transition | 4 | Each |
| 632E2220 | Guardrail Delineator | 38 | Each |
| 650E1080 | Type F68 Concrete Curb and Gutter | 450 | Ft |
| 670E1200 | Type B Frame and Grate | 2 | Each |
| 670E5400 | Precast Drop Inlet Collar | 2 | Each |
| 900E0010 | Refurbish Single Mailbox | 6 | Each |
| 900E0012 | Refurbish Double Mailbox | 5 | Each |
| 900E0022 | Remove and Reset Mailbox | 16 | Each |

^{* -} Denotes Non-Participating

Section M - Pavement Marking

| | T | | |
|--------------------|--|----------|------|
| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
| 633E1200 | High Build Waterborne Pavement Marking Paint, White | 281 | Gal |
| 633E1205 | High Build Waterborne Pavement Marking Paint, Yellow | 180 | Gal |
| 633E3000 | Durable Pavement Marking, 4" White | 50,525 | Ft |
| 633E3005 | Durable Pavement Marking, 4" Yellow | 43,600 | Ft |
| 633E3010 | Durable Pavement Marking, 8" White | 1,600 | Ft |
| 633E3030 | Durable Pavement Marking, 24" White | 784 | Ft |
| 633E3035 | Durable Pavement Marking, 24" Yellow | 420 | Ft |
| 633E3045 | Durable Pavement Marking, Arrow | 20 | Each |
| 633E3060 | Durable Pavement Marking, Message | 6 | Word |
| 633E5050 | Surface Preparation for Pavement Marking | 4,000 | Ft |
| 633E5052 | Surface Preparation for Pavement Marking | 10 | Each |
| 633E5100 | Grooving for Durable Pavement Marking, 4" | 91,700 | Ft |
| 633E5105 | Grooving for Durable Pavement Marking, 8" | 1,600 | Ft |
| 633E5115 | Grooving for Durable Pavement Marking, 24" | 540 | Ft |
| 633E5125 | Grooving for Durable Pavement Marking, Arrow | 14 | Each |

PCN 09P4 - Section C - Traffic Control

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

| STATE OF SOUTH | PROJECT | SHEET | TOTAL SHEETS |
|-------------------|-------------------------------------|-------|-----------------|
| DAKOTA | NH-CR 0081(122)3 & P 0046(87)334 | A1 | А3 |

Section C - Traffic Control

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|------------------------------------|----------|------|
| 110E5020 | Salvage Traffic Sign | 8 | Each |
| 110E7150 | Remove Sign for Reset | 25 | Each |
| 110E7152 | Remove Delineator for Reset | 80 | Each |
| 260E1010 | Base Course | 500.0 | Ton |
| 632E2100 | Reset Delineator | 80 | Each |
| 632E3500 | Reset Sign | 25 | Each |
| 634E0010 | Flagging | 350.0 | Hour |
| 634E0020 | Pilot Car | 150.0 | Hour |
| 634E0110 | Traffic Control Signs | 982.0 | SqFt |
| 634E0120 | Traffic Control, Miscellaneous | Lump Sum | LS |
| 634E0135 | Traffic Control Supervisor | Lump Sum | LS |
| 634E0275 | Type 3 Barricade | 30 | Each |
| 634E0340 | Temporary Raised Pavement Markers | 31.5 | Mile |
| 634E0380 | Tubular Marker | 300 | Each |
| 634E0420 | Type C Advance Warning Arrow Board | 2 | Each |
| 634E0640 | Temporary Pavement Marking | 6,500 | Ft |
| 634E1002 | Detour and Restriction Signing | 947.0 | SqFt |

Section D - Erosion and Sediment Control

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|---|----------|------|
| 110E1690 | Remove Sediment | 6.5 | CuYd |
| 110E1693 | Remove Erosion Control Wattle | 700 | Ft |
| 110E1700 | Remove Silt Fence | 950 | Ft |
| 230E0100 | Remove and Replace Topsoil | Lump Sum | LS |
| 730E0100 | Cover Crop Seeding | 2.0 | Bu |
| 730E0212 | Type G Permanent Seed Mixture | 59 | Lb |
| 731E0200 | Fertilizing | 1.10 | Ton |
| 732E0100 | Mulching | 3.6 | Ton |
| 734E0044 | Soil Stabilizer | 0.5 | Acre |
| 734E0103 | Type 3 Erosion Control Blanket | 2,429 | SqYd |
| 734E0154 | 12" Diameter Erosion Control Wattle | 2,800 | Ft |
| 734E0165 | Remove and Reset Erosion Control Wattle | 700 | Ft |
| 734E0602 | Low Flow Silt Fence | 2,800 | Ft |
| 734E0604 | High Flow Silt Fence | 1,000 | Ft |
| 734E0610 | Mucking Silt Fence | 264 | CuYd |
| 734E0620 | Repair Silt Fence | 950 | Ft |
| 900E1320 | Construction Entrance | 2 | Each |

Section F - Surfacing

| | _ | | |
|--------------------|--|----------|------|
| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
| 004E0050 | Remove Traffic Diversion(s) | Lump Sum | LS |
| 009E0010 | Mobilization | Lump Sum | LS |
| 009E1350 | Restoration of Stockpile Site | Lump Sum | LS |
| 009E3210 | Construction Staking | 7.004 | Mile |
| 009E3301 | Engineer Directed Surveying/Staking | 40.0 | Hour |
| 009E3320 | Checker | Lump Sum | LS |
| 009E4200 | Construction Schedule, Category II | Lump Sum | LS |
| 110E0655 | Remove Interim Crossover Closure | 160 | Ft |
| 110E0730 | Remove Beam Guardrail | 350.0 | Ft |
| 110E0800 | Remove W Beam Guardrail End Terminal | 4 | Each |
| 110E1010 | Remove Asphalt Concrete Pavement | 11,854.6 | SqYd |
| 110E6410 | Remove Type 1 MGS for Reset | 600.0 | Ft |
| 110E6500 | Remove Type 1 Guardrail Transition for Reset | 4 | Each |
| 110E6619 | Remove MGS MASH Tangent End Terminal for Reset | 4 | Each |
| 120E0010 | Unclassified Excavation | 181 | CuYd |
| 120E0100 | Unclassified Excavation, Digouts | 128 | CuYd |
| 120E0600 | Contractor Furnished Borrow | 1,029 | CuYd |
| 120E6200 | Water for Granular Material | 579.1 | MGal |
| 210E0100 | Shoulder Clearing | 10.2 | Mile |
| 210E1000 | Shoulder Preparation | 1.000 | Mile |
| 210E1005 | Surface Preparation | 7.500 | Mile |
| 210E2000 | Shoulder Shaping | 7.500 | Mile |
| 260E1010 | Base Course | 4,799.2 | Ton |
| 260E1030 | Base Course, Salvaged | 14,140.3 | Ton |
| 260E2010 | Gravel Cushion | 7,500.0 | Ton |
| 260E6000 | Granular Material, Furnish | 9,001.1 | Ton |
| 270E0020 | Salvage and Stockpile Asphalt Mix Material | 2,746.1 | Ton |
| 270E0110 | Salvage and Stockpile Granular Material | 14,140.3 | Ton |
| * 270E0220 | Blend and Stockpile Granular Material | 18,002.2 | Ton |
| * 270E0230 | Haul and Stockpile Asphalt Mix Material | 3,891.5 | Ton |
| 320E0005 | PG 58-34 Asphalt Binder | 642.1 | Ton |
| 320E1070 | Class HR Asphalt Concrete | 18,317.1 | Ton |
| 320E1200 | Asphalt Concrete Composite | 370.0 | Ton |
| 320E3000 | Compaction Sample | 6 | Each |
| 320E5010 | Saw and Seal Shoulder Joint | 114,890 | Ft |
| 320E7012 | Grind 12" Rumble Strip or Stripe in Asphalt Concrete | 6.9 | Mile |
| 320E7028 | Grind Centerline Rumble Stripe in Asphalt Concrete | 0.2 | Mile |
| 330E0010 | MC-70 Asphalt for Prime | 96.9 | Ton |
| 330E0100 | SS-1h or CSS-1h Asphalt for Tack | 39.9 | Ton |
| 330E0210 | SS-1h or CSS-1h Asphalt for Flush Seal | 23.9 | Ton |
| 330E1000 | Blotting Sand for Prime | 81.6 | Ton |
| 330E2000 | Sand for Flush Seal | 57.3 | Ton |
| 332E0010 | Cold Milling Asphalt Concrete | 44,039 | SqYd |
| 3223010 | 22.2g / toprion contracts | 44,000 | 9419 |

REVISED 3 December, 2024 - BAH

A1 Estimate of Quantities for PCN 07V2 Sections C, D, F, & M
A2 Estimate of Quantities for PCN 09P4 Sections C, F & M
A2 to A3 Environmental Commitments

INDEX OF SHEETS

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--------------------------------------|-----------|------|
| 380E0050 | 8" Nonreinforced PCC Pavement | 112,186.2 | SqYd |
| 380E5010 | Fast Track Concrete | 1,500.0 | SqYd |
| 380E6000 | Dowel Bar | 73,036 | Each |
| 380E6110 | Insert Steel Bar in PCC Pavement | 34 | Each |
| 410E2600 | Membrane Sealant Expansion Joint | 104.0 | Ft |
| 600E0300 | Type III Field Laboratory | 1 | Each |
| 630E0500 | Type 1 MGS | 387.5 | Ft |
| 630E1501 | Type 1 Retrofit Guardrail Transition | 2 | Each |
| 630E1510 | Type 3 Guardrail Transition | 2 | Each |
| 630E2018 | MGS MASH Tangent End Terminal | 4 | Each |
| 630E5010 | Reset Type 1 MGS | 600.0 | Ft |
| 630E5204 | Reset MGS MASH Tangent End Terminal | 4 | Each |
| 630E5300 | Reset Type 1 Guardrail Transition | 4 | Each |
| 632E2220 | Guardrail Delineator | 38 | Each |
| 650E1080 | Type F68 Concrete Curb and Gutter | 450 | Ft |
| 670E1200 | Type B Frame and Grate | 2 | Each |
| 670E5400 | Precast Drop Inlet Collar | 2 | Each |
| 900E0010 | Refurbish Single Mailbox | 6 | Each |
| 900E0012 | Refurbish Double Mailbox | 5 | Each |
| 900E0022 | Remove and Reset Mailbox | 16 | Each |

^{* -} Denotes Non-Participating

Section M - Pavement Marking

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--|----------|------|
| 633E1200 | High Build Waterborne Pavement Marking Paint, White | 281 | Gal |
| 633E1205 | High Build Waterborne Pavement Marking Paint, Yellow | 180 | Gal |
| 633E3000 | Durable Pavement Marking, 4" White | 50,525 | Ft |
| 633E3005 | Durable Pavement Marking, 4" Yellow | 43,600 | Ft |
| 633E3010 | Durable Pavement Marking, 8" White | 1,600 | Ft |
| 633E3030 | Durable Pavement Marking, 24" White | 784 | Ft |
| 633E3035 | Durable Pavement Marking, 24" Yellow | 420 | Ft |
| 633E3045 | Durable Pavement Marking, Arrow | 20 | Each |
| 633E3060 | Durable Pavement Marking, Message | 6 | Word |
| 633E5050 | Surface Preparation for Pavement Marking | 4,000 | Ft |
| 633E5052 | Surface Preparation for Pavement Marking | 10 | Each |
| 633E5100 | Grooving for Durable Pavement Marking, 4" | 91,700 | Ft |
| 633E5105 | Grooving for Durable Pavement Marking, 8" | 1,600 | Ft |
| 633E5115 | Grooving for Durable Pavement Marking, 24" | 540 | Ft |
| 633E5125 | Grooving for Durable Pavement Marking, Arrow | 14 | Each |

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--------------------------------|----------|------|
| 634E0010 | Flagging | 80.0 | Hour |
| 634E0020 | Pilot Car | 20.0 | Hour |
| 634E0110 | Traffic Control Signs | 293.0 | SqFt |
| 634E0120 | Traffic Control, Miscellaneous | Lump Sum | LS |

PCN 09P4 - Section F - Surfacing

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--|----------|------|
| 009E0010 | Mobilization | Lump Sum | LS |
| 110E1010 | Remove Asphalt Concrete Pavement | 7.8 | SqYd |
| 120E0100 | Unclassified Excavation, Digouts | 5 | CuYd |
| 120E6200 | Water for Granular Material | 0.6 | MGal |
| 210E0100 | Shoulder Clearing | 0.4 | Mile |
| 260E1010 | Base Course | 55.3 | Ton |
| * 260E6000 | Granular Material, Furnish | 227.9 | Ton |
| * 270E0220 | Blend and Stockpile Granular Material | 455.8 | Ton |
| 320E0005 | PG 58-34 Asphalt Binder | 7.7 | Ton |
| 320E1070 | Class HR Asphalt Concrete | 218.9 | Ton |
| 320E3000 | Compaction Sample | 3 | Each |
| 320E5010 | Saw and Seal Shoulder Joint | 1,621 | Ft |
| 330E0100 | SS-1h or CSS-1h Asphalt for Tack | 0.6 | Ton |
| 330E0210 | SS-1h or CSS-1h Asphalt for Flush Seal | 0.4 | Ton |
| 332E0010 | Cold Milling Asphalt Concrete | 1,946 | SqYd |

PCN 09P4 - Section M - Pavement Marking

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--|----------|------|
| 633E3000 | Durable Pavement Marking, 4" White | 2,423 | Ft |
| 633E3005 | Durable Pavement Marking, 4" Yellow | 2,842 | Ft |
| 633E3030 | Durable Pavement Marking, 24" White | 96 | Ft |
| 633E3035 | Durable Pavement Marking, 24" Yellow | 400 | Ft |
| 633E3045 | Durable Pavement Marking, Arrow | 3 | Each |
| 633E3060 | Durable Pavement Marking, Message | 6 | Word |
| 633E5050 | Surface Preparation for Pavement Marking | 5,761 | Ft |
| 633E5052 | Surface Preparation for Pavement Marking | 7 | Each |

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf>

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

| STATE OF | PROJECT | SHEET | TOTAL SHEETS |
|-----------------|-------------------------------------|-------|-----------------|
| SOUTH DAKOTA | NH-CR 0081(122)3 & P 0046(87)334 | A2 | А3 |

REVISED 21 January, 2025 - BAH

COMMITMENT C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

The Contractor will not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:

- < https://sdleastwanted.sd.gov/maps/default.aspx>
- South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04 >

PCN 09P4 - Section C - Traffic Control

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--------------------------------|----------|------|
| 634E0010 | Flagging | 80.0 | Hour |
| 634E0020 | Pilot Car | 20.0 | Hour |
| 634E0110 | Traffic Control Signs | 293.0 | SqFt |
| 634E0120 | Traffic Control, Miscellaneous | Lump Sum | LS |

PCN 09P4 - Section F - Surfacing

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--|----------|------|
| 009E0010 | Mobilization | Lump Sum | LS |
| 110E1010 | Remove Asphalt Concrete Pavement | 7.8 | SqYd |
| 120E0100 | Unclassified Excavation, Digouts | 5 | CuYd |
| 120E6200 | Water for Granular Material | 0.6 | MGal |
| 210E0100 | Shoulder Clearing | 0.4 | Mile |
| 260E1010 | Base Course | 55.3 | Ton |
| 260E6000 | Granular Material, Furnish | 229.1 | Ton |
| 270E0020 | Salvage and Stockpile Asphalt Mix Material | 1.2 | Ton |
| * 270E0220 | Blend and Stockpile Granular Material | 458.2 | Ton |
| * 270E0230 | Haul and Stockpile Asphalt Mix Material | 1.2 | Ton |
| 320E0005 | PG 58-34 Asphalt Binder | 7.7 | Ton |
| 320E1070 | Class HR Asphalt Concrete | 218.9 | Ton |
| 320E3000 | Compaction Sample | 3 | Each |
| 330E0100 | SS-1h or CSS-1h Asphalt for Tack | 0.6 | Ton |
| 330E0210 | SS-1h or CSS-1h Asphalt for Flush Seal | 0.4 | Ton |
| 332E0010 | Cold Milling Asphalt Concrete | 1,946 | SqYd |

^{* -} Denotes Non-Participating

PCN 09P4 - Section M - Pavement Marking

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|--------------------|--|----------|------|
| 633E3000 | Durable Pavement Marking, 4" White | 2,423 | Ft |
| 633E3005 | Durable Pavement Marking, 4" Yellow | 2,842 | Ft |
| 633E3030 | Durable Pavement Marking, 24" White | 96 | Ft |
| 633E3035 | Durable Pavement Marking, 24" Yellow | 400 | Ft |
| 633E3045 | Durable Pavement Marking, Arrow | 3 | Each |
| 633E3060 | Durable Pavement Marking, Message | 6 | Word |
| 633E5050 | Surface Preparation for Pavement Marking | 5,761 | Ft |
| 633E5052 | Surface Preparation for Pavement Marking | 7 | Each |

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf>

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

| STATE OF | PROJECT | SHEET | TOTAL SHEETS |
|-----------------|-------------------------------------|-------|-----------------|
| SOUTH DAKOTA | NH-CR 0081(122)3 & P 0046(87)334 | A2 | A3 |

REVISED 3 December, 2024 - BAH

COMMITMENT C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

The Contractor will not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:

- < https://sdleastwanted.sd.gov/maps/default.aspx>
- South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04 >

COMMITMENT E: STORM WATER

Construction activities constitute 1 acre or more of earth disturbance and/or work in a waterway.

Action Taken/Required:

The DANR General Permit for Stormwater Discharges Associated with Construction Activities is required for construction activity disturbing one or more acres of earth and work in a waterway. The SDDOT is the owner of this permit and will submit the NOI to DANR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DANR letter of approval is received.

The Contractor must adhere to the "Special Provision Regarding Storm Water Discharges to Waters of the State."

The Contractor will complete the DANR Contractor Certification Form prior to the pre-construction meeting. The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the permit for this project. Work may not begin on this project until this form is signed and submitted to DANR.

The form can be found at:

https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_CGPA ppendixCCA2018Fillable.pdf >

The Contractor is advised that permit coverage may also be required for offsite activities, such as borrow and staging areas, which are the responsibility of the Contractor.

Storm Water Pollution Prevention Plan

The Storm Water Pollution Prevention Plan (SWPPP) will be developed prior to the submittal of the NOI and will be implemented for all construction activities for compliance with the permit. The SWPPP must be kept on-site and updated as site conditions change. Erosion control measures and best management practices will be implemented in accordance with the SWPPP.

The DOT 298 Form will be used for site inspections and to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents and retained for a minimum of three years.

The inspection will include disturbed areas of the construction site that have not been finally stabilized, areas used for storage materials, structural control measures, and locations where vehicles enter or exit the site. These areas will be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPPP will be observed to ensure that they are operating correctly, and sediment is not tracked off the site.

Information on storm water permits and SWPPPs are available on the following websites:

SDDOT: < https://dot.sd.gov/doing-business/environmental/stormwater >

DANR:https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/default.aspx

EPA: < https://www.epa.gov/npdes >

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

Action Taken/Required:

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

- 1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, "No Dumping Allowed".
- 2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.

| STATE OF | PROJECT | SHEET | TOTAL SHEETS |
|-----------------|-------------------------------------|-------|-----------------|
| SOUTH DAKOTA | NH-CR 0081(122)3 & P 0046(87)334 | A3 | А3 |

REVISED 11 October, 2024 - BAH

COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historic Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the appropriate SHPO/THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 100 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

SHPO/THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.