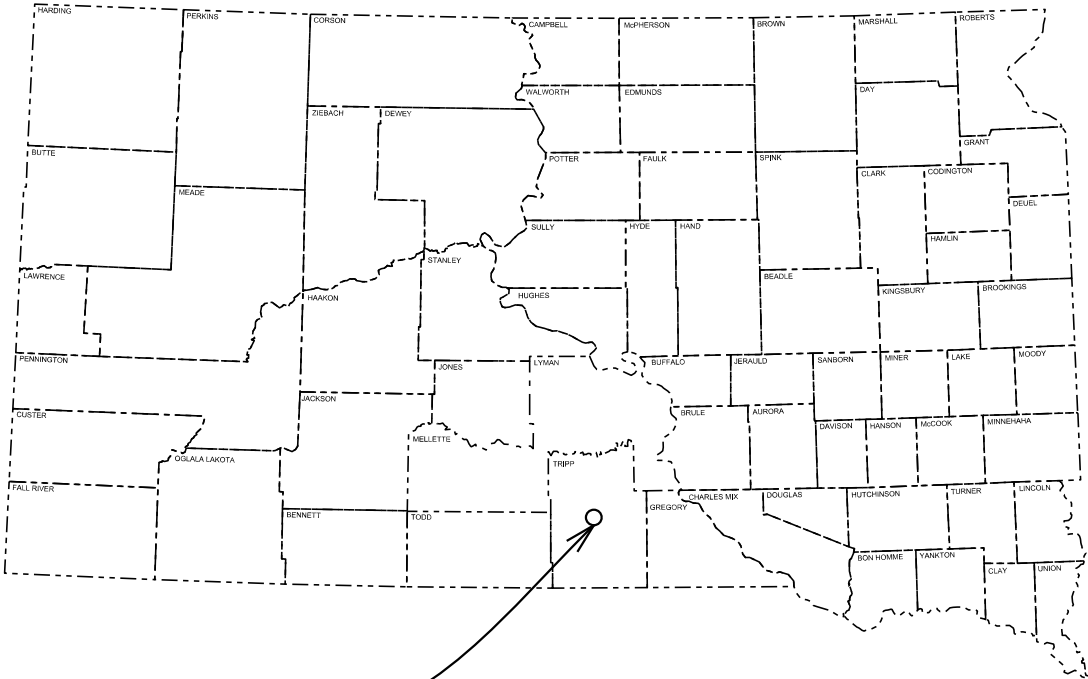


PLOT SCALE - 1:202,405

PLOTTED FROM - TRW11NT20

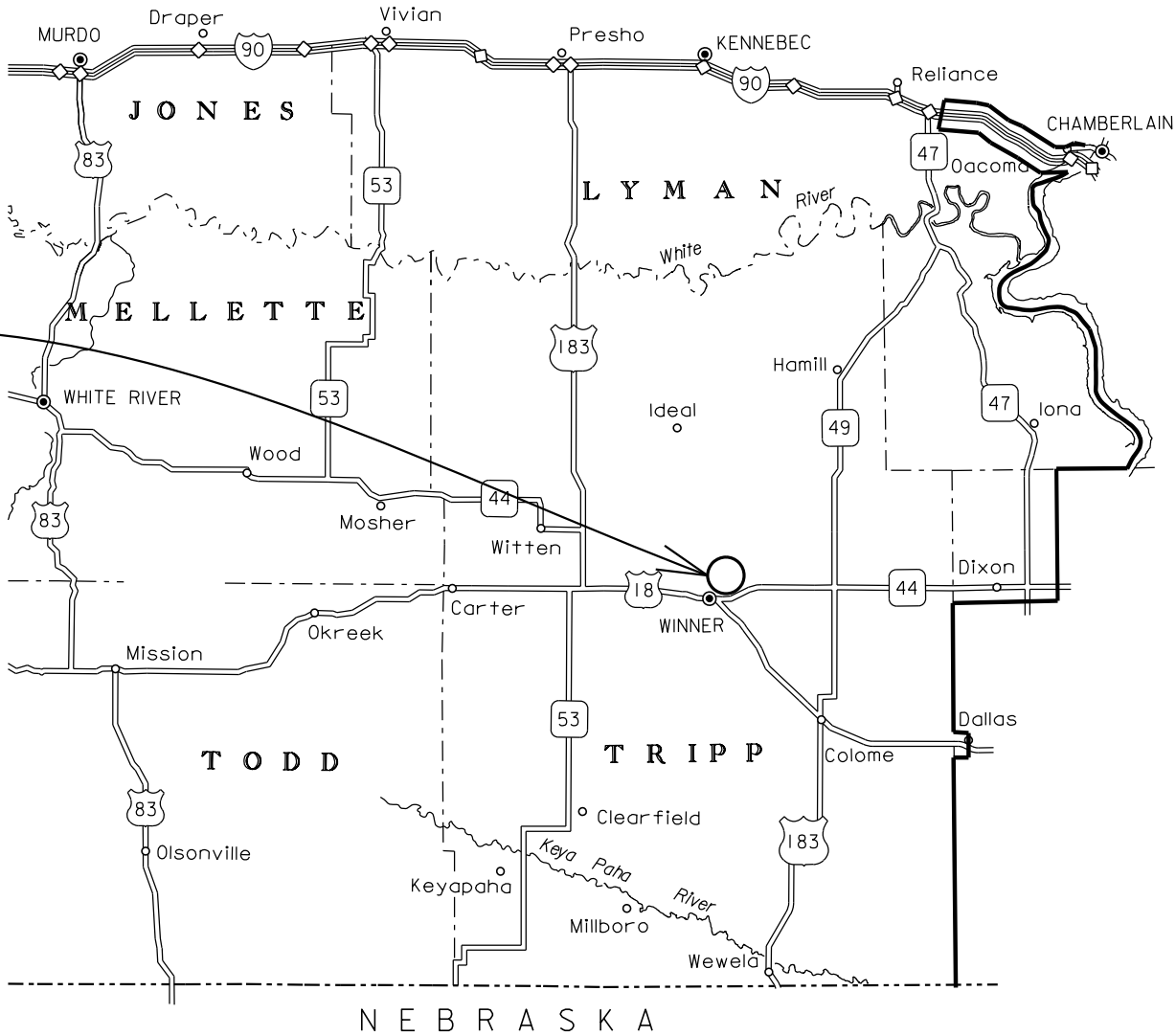


PROJECT

PROJECT

STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION  
PLANS FOR PROPOSED  
**PROJECT 0009-391**  
**SDDOT WINNER AREA YARD**  
ASPHALT CONCRETE RESURFACING,  
ASPHALT SURFCE TREATMENT  
and FOG SEAL

PCN i7cq



NEBRASKA

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	0009-391	1	7

Plotting Date: 02/07/2024

INDEX OF SECTIONS

Sheet No. 1	Title Sheet
Sheet No. 2-5	Estimate of Quantities & Plan Notes
Sheet No. 6	Winner Yard Layout
Sheet No. 7	Pavement Marking Layout



PLOT NAME - 1

FILE - ...\\WORKING\\17CO-TITLE.DGN

STORM WATER PERMIT  
NO PERMIT REQUIRED

PROJECT LOCATION IS DESIGNATED BY THE CIRCLE ON MAP ABOVE.  
○ = SDDOT WINNER AREA YARD IN WINNER, SD

ESTIMATE OF QUANTITIES

PROJECT 0009-391 (WINNER MAINTENANCE YARD)

Non-Section Method

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
120E0100	Unclassified Excavation, Digouts	100	CuYd
320E1200	Asphalt Concrete Composite	2,425.0	Ton
330E0300	SS-1h or CSS-1h Asphalt for Fog Seal	3.5	Ton
332E0010	Cold Milling Asphalt Concrete	11,146	SqYd
360E0042	CRS-2P Asphalt for Surface Treatment	15.4	Ton
360E1200	Modified Cover Aggregate	203.6	Ton
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	1,870	Ft

SPECIFICATIONS

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

UTILITIES

Utilities are not planned to be affected on this project. If utilities are identified near the improvement area through SD One Call Process as required by South Dakota Codified Law 49-7A and Administrative Rule Article 20:25, the Contractor will contact the Engineer to determine modifications that will be necessary to avoid utility impacts.

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.

COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

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.

COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

State Historical Preservation Office (SHPO or THPO) concurrence has not been obtained for this project.

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 of 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 will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office to determine an appropriate course of action.

The Contractor is responsible 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.

SEQUENCE OF WORK

Mill existing asphalt concrete as detailed on plan sheets.

- Complete digout repairs
- Place Asphalt for Tack
- Place Asphalt Concrete Composite
- Place Asphalt Surface Treatment
- Place Fog Seal
- Complete Brooming
- Complete Permanent Pavement Markings

Work at the SDDOT Winner Area Yard will be coordinated with Greg Ulmer, Highway Maintenance Supervisor Winner (605-842-0810) to ensure that construction has minimal interference with normal operations for SD DOT and Highway Patrol.

SCOPE OF WORK

The quantities included in the plans for digout repairs, cold milling, asphalt concrete composite, and asphalt surface treatment are estimated and will be completed as approved by the Engineer.

The scope of work for this project may change as determined by the Engineer. There will be no price adjustment for any quantity changes to this project.

Winner Maintenance Yard

The Contractors attention is drawn to the fact that the fuel island & fuel fills are present adjacent to Zones 5, 8 and 9. Care is to be taken to avoid damaging the items in these areas. Any damage to the concrete fueling island will be repaired by the Contractor, to the satisfaction of the Engineer, at no expense to the State.

The Contractors attention is drawn to the fact that the underground fuel tanks and fuel island adjacent to Zones 5, 8 and 9 will be replaced on another project during the 2024 construction season. The Contractor will coordinate work on this project with the Contractor replacing the underground fuel tanks and fuel island.

Any damage to existing utilities in the SDDOT Winner Area Yard will be repaired by the Contractor at no expense to the State.

Any damage to existing concrete, buildings, etc. will be repaired by the Contractor at no expense to the State.

Unclassified Excavation, Digouts

The Contractor will then repair any unstable areas as Unclassified Excavation, Digouts. The digouts will be backfilled with material generated from the cold milling. All costs for excavation and backfilling digouts including backfill material will be incidental to the contract unit bid item price “Unclassified Excavation, Digouts”.

ASPHALT CONCRETE COMPOSITE

All work will be done in accordance with section 324 of the Standard Specifications for Roads & Bridges, 2015 Edition.

In place field densities will not be taken. Specified Roller Coverage will apply.

Placement of Asphalt Concrete Composite will be accomplished with a self-propelled paver in all areas except for areas adjacent to the generator and buildings. The Engineer may allow alternate methods in the smaller areas provided a steel faced vibratory roller or vibratory plate compactor is used for compaction.

The Contractor will furnish, install and maintain “TRUCK CROSSING” signs. The location for this pair of signs will be determined in the field. Payment for these signs will be incidental to the various contract items.

It is estimated that 2,425 tons of Asphalt Concrete Composite will be needed overall to complete the paving of the designated areas. The depths and locations of the paving may be changed as per direction of the Engineer. Any additional Asphalt Concrete Composite will be placed at locations as directed by the Engineer.

COLD MILLING ASPHALT CONCRETE

Asphalt Cold Milling Material generated from the SDDOT Winner Area Yard will be stockpiled in the SDDOT Winner Area Yard. The stockpile location will be determined by Greg Ulmer, Highway Maintenance Supervisor at Winner (605-842-0810). Payment for stockpiling this material, estimated to be 1,418 Ton, shall be incidental to the Unit Bid Price per Square Yard for Cold Milling Asphalt Concrete.

Cold Milling will be completed to the satisfaction of the Engineer.

ASPHALT FOR SURFACE TREATMENT

Modified Aggregate, CRS-2P Asphalt for Surface Treatment and SS-1h or CSS-1h Asphalt for Fog Seal will be used for all Zones for this project.

CRS-2P Asphalt for Surface Treatment will be placed at a rate of 0.22 gallon per square yard.

Modified Cover Aggregate shall be placed at a rate of 25 pounds per square yard.

SS-1h or CSS-1h Asphalt for Fog Seal shall be placed at a rate of 0.05 gallon per square yard.

PROJECT BROOMING

Brooming will be accomplished using a pickup broom. Material generated from the brooming will be stockpiled in the SDDOT Winner Area Yard. The stockpile location will be determined by Greg Ulmer, Highway Maintenance Supervisor at Winner (605-842-0810). Payment for stockpiling this material will be incidental to the various contract bid items.

MODIFIED COVER AGGREGATE

Modified Cover Aggregate will be used for all Zones for this project.

A minimum of 14 days prior to construction, the Contractor will submit production sample test results and aggregate samples from each aggregate source used for the project to be tested by the Area Office. Project operations may not begin until production test results are received and informational samples are tested. The samples must be collected from the stockpile location. A passing sample is required from each source prior to use on the project.

Cover Aggregate will be screened over a 1-inch screen immediately prior to application.

Cover Aggregate will conform to the following gradation requirements:

Sieve Size	Percent Passing
3/8 inch	100
¼ inch	25-70
No. 4	0 - 25
No. 8	0 – 5
No. 40	0 - 4
No. 200	0 – 1.3

The plasticity index specification may be waived if not more than 4% of the material passes the No. 40 sieve.

Application of the Modified Cover Aggregate will be maintained within 500 feet or have a time limit of 2 minutes between the application of the CRS-2P for Asphalt Surface Treatment and the application of the cover aggregate, whichever amounts to the shorter period of time.

The Contractor will continue chip spreader progress, forward, thru the asphalt application at any end where work will be temporarily shut down for a time greater than 5 minutes, to allow for satisfactory uniform rolling of the placed aggregate. The Contractor will not allow the chip spreader, trucks, or other equipment to lie dormant on the aggregate while transitioning between asphalt distributor loads and or any other temporary shutdown of production, before uniform rolling is complete.

All passes of the rollers will be completed within 8 minutes of application of the CRS-2P Asphalt for Surface Treatment.

All other requirements for Type 1A Cover Aggregate will apply.

A cover aggregate gradation failure on the #200 sieve will cause all operations to cease immediately and the Engineer will determine correction action(s), if necessary, prior to restarting operations.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-391	4	7

**PERMANENT PAVEMENT MARKINGS**

The Contractor will be responsible for mapping the parking line layout prior to construction. The Contractor will be required to duplicate the parking lot striping that is currently in the parking lot in Zones 2, 3, and 4. A solid parking line will be painted along the east side of Zone 9 along with a partial parking line in Zone 11. The solid parking lines in Zone 9 and Zone 11 will be placed as directed by the Engineer.

**HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT**

All materials will be applied as per manufacturer’s recommendations. High build waterborne pavement marking paint will conform to the supplemental specifications for Section 980.1 B.

Reflective media will consist of glass beads.

High Build Waterborne Pavement Marking Paint applied after October 15 must be formulated as cold-weather waterborne paint. Cold weather waterborne paint will meet the requirements of Section 980.1 C.

Due to the small quantity. Testing of High Build Waterborne Pavement Marking Paint and Glass Beads will not be required. Acceptance will be based off of visual inspection.

**RATES OF MATERIALS FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT**

Solid 4” line = 0.43 Gal/100 Ft

All cost for materials, labor and equipment necessary to furnish and install the pavement markings will be incidental to the contract unit price for the respective High Build Waterborne Pavement Marking Paint items.

Zone	Asphalt Concrete Composite Length (Ft)	Asphalt Concrete Composite Width (Ft)	Asphalt Concrete Composite Area (SqYd)	Asphalt Concrete Composite Depth (In)	Asphalt Concrete Composite (Ton)	Cold Milling Length (Ft)	Cold Milling Width (Ft)	Cold Milling Area (SqYd)	Cold Milling Depth (Inches)	Cold Milling (Ton)	Notes
1	25	60	167	3	28	0	0	0	0	0	Asphalt Concrete Composite will be placed around generator. Handwork will be required.
2	190	60	1267	2	141	190	60	1267	2	141	
3	44	90	440	2	49	44	90	440	2	49	
4	100	113	1256	2	139	100	113	1256	2	140	
5	85	80	756	6	252	85	80	756	6	252	Coordinate work in this area with fuel tank installation contractor.
6	20	45	100	3	17	0	0	0	0	0	SDDOT Maintenance forces will complete prep work in this area.
7	140	160	2489	3	414	140	160	2489	3	415	
8	15	33	55	3	9	15	33	55	3	9	Coordinate work in this area with fuel tank installation contractor.
9	40	416	1849	2	205	40	416	1849	2	205	Coordinate work in this area with fuel tank installation contractor.
10	210	226	5273	2	585	100	210	2333	1	130	Cold mill 2" at the salt dome/shed to 0" at 100' south of salt dome/shed. Also cold mill 20' wide by 126' long approximately 2" deep as directed by the Engineer to provide drainage on the west half thru this zone.
10a						126	20	280	2	31	
11	125	190	2639	4	586	190	20	422	2	47	Cold mill 20' wide by 190' long approximately 2" deep as directed by the Engineer to provide drainage on the west half thru this zone. DOT will prep remaining area.
Totals			16289		2425			11146		1418	

Asphalt Surface Treatment

Zone	SQYD	Modified Cover Aggregate Rate (Lbs/SqYd)	Modified Cover Aggregate (Ton)	CRS-2P Asphalt for Surface Treatment Rate (Gal/SqYd))	CRS-2P Asphalt for Surface Treatment (Ton)	SS-1h or CSS-1h Asphalt for Fog Seal Rate (Gal/SqYd)	SS-1h or CSS-1h Asphalt for Fog Seal (Ton)
1	167	25	2.1	0.22	0.16	0.05	0.04
2	1267	25	15.8	0.22	1.20	0.05	0.27
3	440	25	5.5	0.22	0.42	0.05	0.09
4	1256	25	15.7	0.22	1.19	0.05	0.27
5	756	25	9.4	0.22	0.71	0.05	0.16
6	100	25	1.3	0.22	0.09	0.05	0.02
7	2489	25	31.1	0.22	2.35	0.05	0.54
8	55	25	0.7	0.22	0.05	0.05	0.01
9	1849	25	23.1	0.22	1.75	0.05	0.40
10	5273	25	65.9	0.22	4.99	0.05	1.13
11	2639	25	33.0	0.22	2.50	0.05	0.57
Totals	16289		203.6		15.4		3.50



# SDDOT Winner Area Yard

