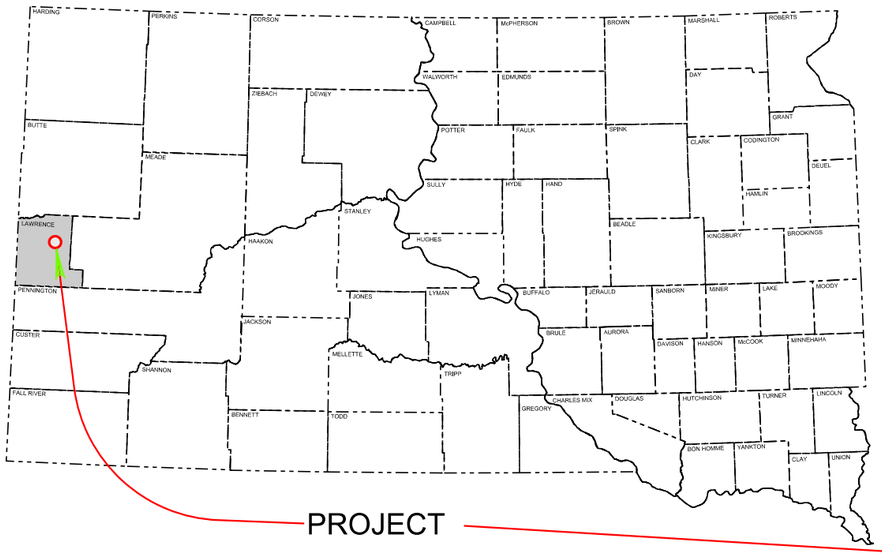
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D370	1	8

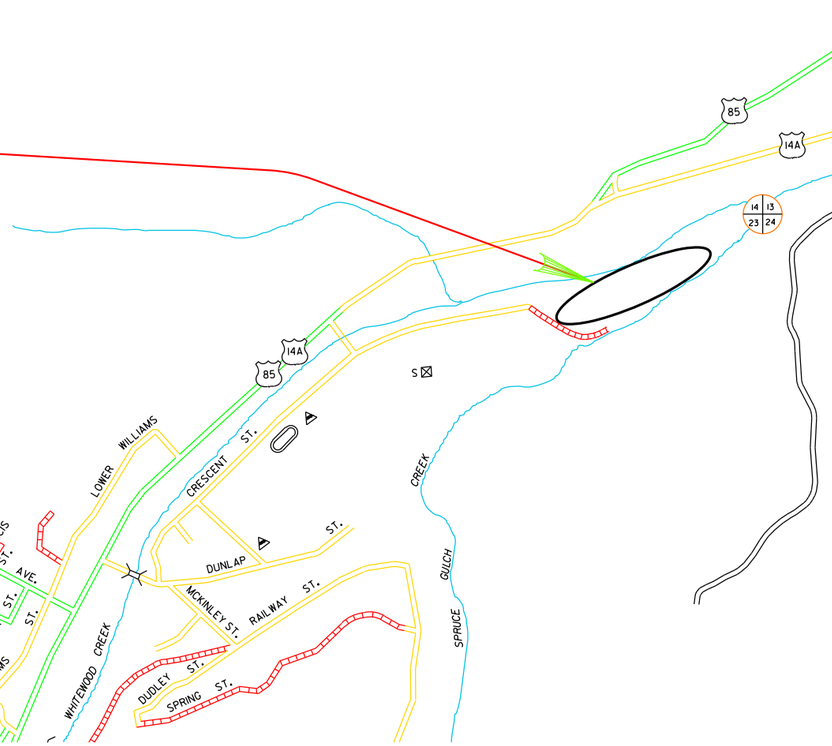
Plotting Date: 03/27/2014

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT 410D370
LAWRENCE COUNTY

Asphalt Concrete Surfacing
PCN i3cc





DEADWOOD

T 5 N R 3 E

INDEX OF SHEETS

STORM WATER PERMIT

None Required

Plot Scale - 1:200

Plotted From - trrc11610

File - ...\plans\Deadwood Yard\title.dgn

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D370	2	8

Estimate of Quantities

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
120E0100	Unclassified Excavation, Digouts	256	CuYd
210E1010	Site Preparation	Lump Sum	LS
260E1050	Base Course, Salvaged Asphalt Mix	61.0	Ton
260E1080	Base Course, Salvaged, State Furnished	280.0	Ton
320E1200	Asphalt Concrete Composite	1,434.0	Ton
332E0010	Cold Milling Asphalt Concrete	1,140	SqYd

SPECIFICATIONS

Standard Specifications for Roads & Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in the Proposal.

ENVIRONMENTAL COMMITMENTS

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived 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. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pit, or staging site associated with the project, cease construction activities in the affected area until the Whooping Crane departs and contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

COMMITMENT C: WATER SOURCE

The Contractor shall not withdraw water with equipment previously used outside the State of South Dakota without prior approval from the SDDOT Environmental Office. Thoroughly wash all construction equipment before entering South Dakota to reduce the risk of invasive species introduction into the project vicinity.

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 shall 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 State ROW.

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

The waste disposal site(s) shall 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 Project Engineer.

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

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction and/or demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of 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 of time not to exceed the duration of the project. Prior to project completion, the waste shall 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) shall be incidental to the various contract items.

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D370	3	8

COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historical Preservation Office (SHPO or THPO) for all work included within the project limits and all designated option borrow sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require review of cultural resources impacts. This work includes, but is not limited to: staging areas, borrow sites, waste disposal sites, and all material processing sites.

The Contractor shall arrange and pay for a cultural resource survey and/or records search. 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; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor shall provide ARC with the following: a topographical map or aerial view on 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 shall submit the records search or cultural resources survey report and if the location of the site is within the current geographical or historic boundaries of any South Dakota reservation to SDDOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). 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.

If evidence for cultural resources is uncovered during project construction activities, then such activities shall cease and the Project Engineer shall be immediately notified. The Project Engineer will contact the SDDOT Environmental Engineer in order 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 staging areas, borrow sites, waste disposal sites, or material processing sites that affect wetlands, threatened and endangered species, or waterways. The Contractor shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

WORK DESCRIPTION

Work on this project includes cold milling asphalt concrete and an asphalt concrete overlay of the Deadwood Maintenance Yard.

UTILITIES

The Contractor shall be responsible for locating and protecting any utility that would conflict with any work. Utilities are not planned to be affected on this project. If utilities are identified near the improvement area through the SD One Call Process as required by South Dakota Codified Law 49-7A and Administrative Rule Article 20:25, the contractor shall contact the project engineer to determine modifications that will be necessary to avoid utility impacts.

Any damage done to a utility will be the Contractor's responsibility to repair.

SAWING EXISTING SURFACING

Where new asphalt concrete is placed adjacent to existing asphalt concrete or portland cement concrete the existing asphalt concrete (except cold milled areas) or portland cement concrete shall be sawed full depth to a true line with a vertical face. No separate payment shall be made for sawing.

SURFACING THICKNESS DIMENSIONS

Plans tonnage will be applied even though the thickness may vary from that shown in the plans. At those locations where material must be placed to achieve a required elevation, plans tonnages may be varied to achieve the required elevation.

SITE PREPARATION

Provided in the Estimate of Quantities is the bid item "Site Preparation" for shaping the areas of existing granular material prior to placement of the 4" Asphalt Concrete Composite. The Contractor shall cut and shape areas of existing granular material to elevations that the placement of the 4" Asphalt Composite will match the 2" Asphalt Concrete Composite and provide positive drainage away from the buildings. No field measurement will be made.

TABLE OF QUANTITIES

	Area SqFt	Cold Milling SqYd	Unclassified Excavation Digouts CuYd	Base Course, Salvaged Asphalt Mix Ton	Base Course, Salvaged, State Furnished Ton	Asphalt Concrete Composite Ton
2" asphalt	51985	1140				649.8
4" asphalt	24454					611.4
digouts	6912		256	61	280	172.8
Totals:		**1140**	**256**	**61**	**280**	**1434**

COLD MILLING ASPHALT CONCRETE

Loose material resulting from the cold milling shall be immediately picked up, and stockpiled for use as Base Course, Salvaged Asphalt Mix.

Cold Milling Asphalt Concrete shall be 1" and as necessary so that the top mat of the new asphalt surfacing (2") will match existing surfaces and provide positive drainage away from buildings. The milling depths might vary due to irregularities in the surface.

Cold milling asphalt is estimated to produce 61 tons (32 Cubic Yards) of salvaged asphalt concrete material. An estimated 61 tons of salvage asphalt concrete will be used on this project as Base Course Salvaged Asphalt Mix.

UNCLASSIFIED EXCAVATION DIGOUTS

Provided in the Estimate of Quantities is Unclassified Excavation-Digouts for the necessary removal of unstable material. The locations of the digouts will be determined in the field by the Engineer. Unclassified Excavation Digouts depth shall be 1 foot or as directed by the Engineer. Backfill shall be 8" of Base Course, Salvaged Asphalt Mix placed in 4" lifts and 4" of Asphalt Concrete Composite placed in 2" lifts.

The existing asphalt concrete shall be sawed full depth with a vertical face to the removal limits established by the Engineer. The dimensions provided in these plans are subject to change in the field, at the discretion of the Engineer. Payment will be based on the actual quantities installed.

All costs associated with sawing, removal and disposal of existing asphalt and base material shall be incidental to the contract unit price per cubic yard "Unclassified Excavation Digouts".

WATER FOR COMPACTION

No separate payment will be made for the Water for Granular Material and all costs associated shall be incidental to the contract unit price per ton of "Base Course, Salvaged Asphalt Mix" and "Base Corse, Salvaged, State Furnished". Four percent, plus or minus, moisture will be required at the time of compaction unless otherwise directed by the Engineer

BASE COURSE, SALVAGED ASPHALT MIX

Base Course, Salvaged Asphalt Mix shall be obtained from the material produced on this project and may be used without further testing. This material shall be used for backfilling digouts.

All other requirements for Base Course, Salvaged shall apply.

Compaction of the Base Course, Salvaged Asphalt Mix shall be to the satisfaction of the Engineer.

Included in the Estimate of Quantities is 61 tons of Base Course, Salvaged Asphalt Mix for backfill of Unclassified Excavation Digouts.

The contract unit price per ton for Base Course, Salvaged Asphalt Mix shall include loading, placing, and compacting the cold milled material.

BASE COURSE, SALVAGED, STATE FURNISHED

Base Course shall be furnished by the State of South Dakota. This material shall be obtained from the base course stockpile at the Deadwood Maintenance Yard located at 57 Crescent Dr, in Deadwood.

Base Course, Salvaged, State Furnished shall be used for backfilling digouts.

This material is royalty free to the contractor. Furnished cost to the State for the Base Course, Salvaged, State Furnished is $10.00 per ton.

The contract unit price per ton for Base Course, Salvaged, State Furnished shall include loading, placing, and compacting the Base Course, Salvaged, State Furnished material.

ASPHALT CONCRETE COMPOSITE

The 2” Asphalt Concrete Composite as per these plans shall be placed in 1 – 2” lifts for a total thickness of 2”.

The 4” Asphalt Concrete Composite as per these plans shall be placed in 2 – 2” lifts for a total thickness of 4”.

Asphalt Concrete Composite shall be furnished by the Contractor.

Mineral aggregate for the Asphalt Concrete Composite shall conform to the requirements of the Standard Specifications for Class E, Type 1.

All other requirements in the Standard Specifications for Asphalt Concrete Composite shall apply.

The asphalt binder used in the mixture shall be PG 64-22, PG 64-28 or 64-34 Asphalt Binder.

SS-1h or CSS-1h Emulsified Asphalt for Tack shall be applied to the existing surfacing at the rate of 0.05 gallons per square yard.

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal shall be applied to the top lift at the rate of 0.05 gallons per square yard.

Location and quantity shown in the plans are approximate. Exact locations are to be set by the Engineer. The Engineer reserves the right to adjust quantities and/or add location dependent on the condition of the yard at the time of the work.

TRAFFIC CONTROL

Maintenance of traffic for this project will be provided by the SDDOT.

The Contractor shall notify the SDDOT two weeks prior to beginning construction to coordinate traffic control for the project.

Work activities during non-daylight hours are subject to prior approval. Daylight hours are considered ½ hour before sunrise until ½ hour after sunset.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D370	6	8

Plotting Date: 03/27/2014

EXISTING TOPOGRAPHY SYMBOLOGY AND LEGEND

- Anchor
- Antenna
- Approach
- Assumed Corner
- Azimuth Marker
- Bbq Grill/ Fireplace
- Bearing Tree
- Bench Mark
- Box Culvert
- Bridge
- Brush
- Buildings
- Bulk Tank
- Cattle Guard
- Cemetery
- Centerline
- Cistern
- Clothes Line
- Commercial Sign Double Face
- Commercial Sign One Post
- Commercial Sign Overhead
- Commercial Sign Two Post
- Concrete Symbol
- Creek Edge
- Curb/Gutter
- Curb
- Dam Grade/Dike/Levee
- Ditch Block
- Drainage Profile
- Drop Inlet
- Edge Of Asphalt
- Edge Of Concrete
- Edge Of Gravel
- Edge Of Other
- Edge Of Shoulder
- Elec. Trans./Power Jct. Box
- Fence Barbwire
- Fence Chainlink
- Fence Electric
- Fence Misc.
- Fence Rock
- Fence Snow
- Fence Wood
- Fence Woven
- Fire Hydrant
- Flag Pole
- Flower Bed
- Gas Valve Or Meter
- Gas Pump Island
- Grain Bin
- Guardrail
- Gutter
- Guy Pole
- Haystack
- Hedge
- Highway R.O.W. Marker
- Information Sign One Post
- Information Sign Two Post
- Interstate Close Gate
- Iron Pin
- Irrigation Ditch
- Lake Edge
- Lawn Sprinkler
- Mailbox
- Manhole Electric
- Manhole Gas
- Manhole Misc
- Manhole Sanitary Sewer
- Manhole Storm Sewer
- Manhole Telephone
- Manhole Water
- Merry-Go-Round
- Microwave Radio Tower
- Misc. Property Corner
- Misc. Post
- Overhang Or Encroachment
- Overhead Utility Line — OH —
- Parking Meter
- Pipe With End Section
- Pipe With Headwall
- Pipe Without End Section
- Playground Slide
- Playground Swing
- Power And Light Pole
- Power And Telephone Pole
- Power Meter
- Power Pole
- Power Pole And Transformer
- Power Tower Structure
- Propane Tank
- Property Pipe
- Property Pipe With Cap
- Property Stone
- Public Telephone
- Railroad Crossing Signal
- Railroad Milepost Marker
- Railroad Profile
- Railroad R.O.W. Marker
- Railroad Signs
- Railroad Switch
- Railroad Track
- Railroad Trestle
- Rebar
- Rebar With Cap
- Reference Mark
- Retaining Wall
- Riprap
- River Edge
- Rock And Wire Baskets
- Rockpiles
- Route Sign One Post
- Route Sign Two Post
- Satellite Dish
- Septic Tank
- Shrub Tree
- Sidewalk
- Sign Face
- Sign Post
- Slough Or Marsh
- Spring
- Stream Gauge
- Street Marker
- Telephone Fiber Optics — T/F —
- Telephone Junction Box
- Telephone Pole
- Television Cable Jct Box
- Television Tower
- Test Wells/Bore Holes
- Traffic Signal
- Trash Barrel
- Tree Belt
- Tree Coniferous
- Tree Deciduous
- Tree Stumps
- Triangulation Station
- Underground Electric Line — P —
- Underground Gas Line — G —
- Underground Sanitary Sewer — S —
- Underground Storm Sewer — S —
- Underground Tank
- Underground Telephone Line — T —
- Underground Television Cable — TV —
- Underground Water Line — W —
- Warning Sign One Post
- Warning Sign Two Post
- Water Fountain
- Water Hydrant
- Water Meter
- Water Tower
- Water Valve
- Water Well
- Weir Rock
- Windmill
- Wingwall
- Witness Corner
- State and National Line
- County Line
- Section Line
- Quarter Line
- Sixteenth Line
- Property Line
- Construction Line
- R. O. W. Line
- New R. O. W. Line
- Cut and Fill Limits
- Control of Access
- New Control of Access
- Proposed ROW (After Property Disposal)

Plot Scale - 1:200

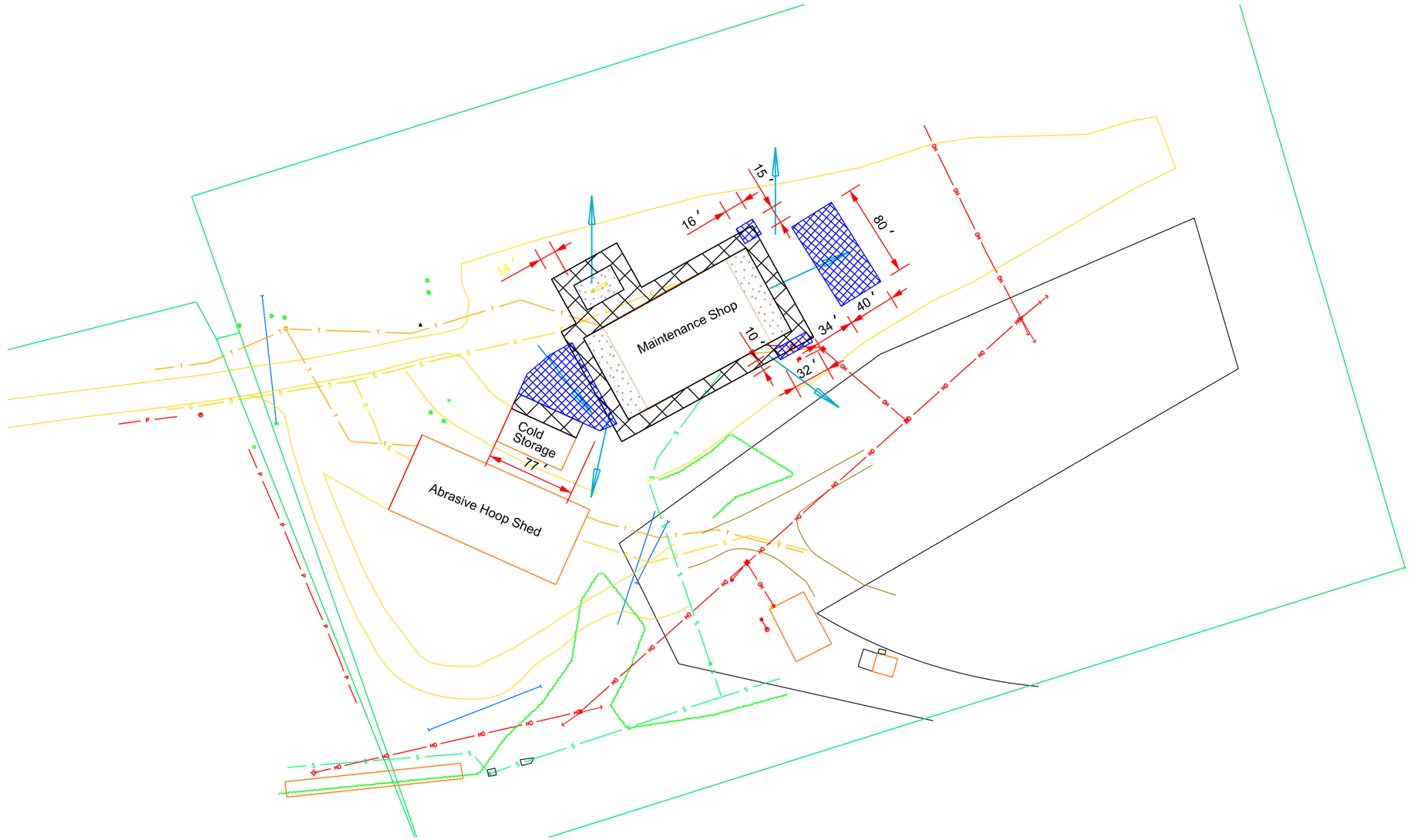
Plotted From - trrc11610

File - ...\Deadwood Yard\topog symb.dgn

COLD MILLING ASPHALT CONCRETE
& UNCLASSIFIED EXCAVATION DIGOUTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D370	7	8

Plotting Date: 03/27/2014



LEGEND:

Cold Mill Asphalt Concrete (1140 Sq Yd)

Unclassified Excavation Digout
8" Base Course Salvaged Asphalt/State Furnished
4" Asphalt Concrete Composite (6,912 Sq Ft)

Plot Scale - 1:100

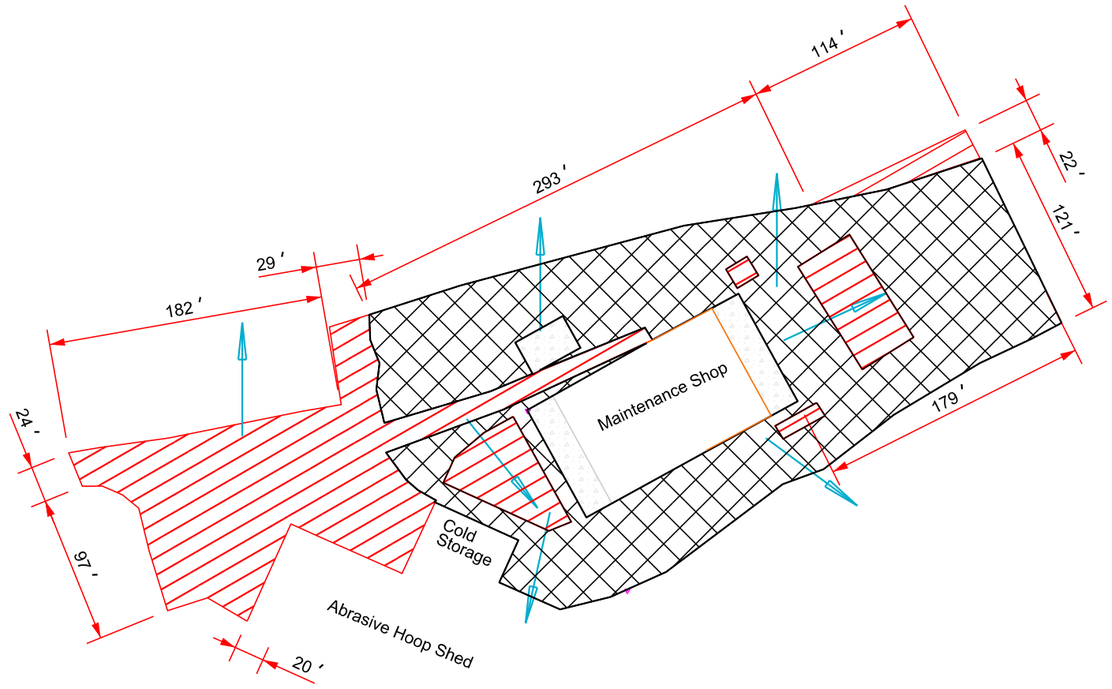
Plotted From - trrc11610

File - ...\Deadwood Yard\cold Milling.dgn

ASPHALT CONCRETE COMPOSITE OVERLAY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D370	8	8

Plotting Date: 03/27/2014



LEGEND:

- 4" Asphalt Concrete Composite (31,366 Sq Ft)
- 2" Asphalt Concrete Composite (51,985 Sq Ft)

Plot Scale - 1:100

Plotted From - trrc11610

File - ...\Deadwood Yard\overlay.dgn