

ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
634E0010	Flagging	500	Hour
634E0100	Traffic Control	204	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

SPECIFICATIONS

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

WORK DESCRIPTION

Work on this project will consist of the following:

1. Clearing and disposal of all merchantable and unmerchantable trees, brush, and woody vegetation within designated areas along US 385. All species and sizes will be removed from this area.

UTILITIES

The Contractor shall contact the involved utility companies through South Dakota One Call (1-800-781-7474) prior to starting work. It shall be the responsibility of the Contractor to coordinate work with the utility owners to avoid damage to existing facilities.

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.

WASTE DISPOSAL SITE

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

Construction/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 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/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/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".
- 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.

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	385-451	2	5

GENERAL MAINTENANCE OF TRAFFIC

Traffic control shall be maintained in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), Section 634 of the Standard Specifications and these plans.

The Contractor shall be required to have a person available 24 hours/day, 7 days/week to maintain traffic control devices. The name and cellular telephone number shall be provided to the Project Engineer.

Work activities shall be conducted during daylight hours only. Traffic shall be returned to the normal driving lanes during non-working hours. Storage of vehicles and equipment shall be outside the clear zone (30' from white edgeline) and as near to the right-of-way as possible.

All equipment and vehicles entering and exiting the work area shall display a flashing amber light visible from all directions at a minimum distance of ¼ mile.

Non-applicable signing will be covered or removed during periods of inactivity. All costs to do this work shall be incidental to Traffic Control, Miscellaneous.

The Contractor shall provide documentation that all breakaway sign supports comply with FHWA NCHRP 350 and/or MASH crash-worthy requirements.

Certified flaggers with appropriate advance warning signs for both directions of travel will be required for any work that occupies the traveled lanes. The road shall be kept open to traffic with not more than 5 minutes delay time. The 15-20 minutes closure shown on Standard Plate Number 634.30 shall be changed to not exceeding **5 minutes**.

Only one set of signs according to Standard Plate Number 634.30 is included in the estimate of quantities. The Contractor shall only work at one site unless the Engineer approves additional work sites.

Signs and other road appurtenances are designated to be retained and shall be protected from damage. The Contractor shall repair, replace, or restore all damaged signs and other road appurtenances caused by the Contractor at no cost to the State.

INVENTORY OF TRAFFIC CONTROL DEVICES

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
W3-4	48" x 48"	BE PREPARED TO STOP	2	34	68
W20-1	48" x 48"	ROAD WORK AHEAD	2	34	68
W20-7a	48" x 48"	FLAGGER	2	34	68
			TOTAL	UNITS	204

CLEARING

The Forest Service has prepared the Daylight ROW Timber Sale. The SD DOT has paid the Forest Service for this timber sale. The timber sale contract package includes approximately 82 CCF merchantable timber. This timber sale only includes the clearing on the National Forest land included within the project limits. At least 2 weeks prior to beginning work, Rick McBride, USFS, 605-642-4622, must be contacted, to set up a pre-work meeting and make arrangements for Product Removal Permits.

There is also clearing work to be completed within the existing highway rightof-way that is not on National Forest Land. There are approximately 50 merchantable trees included in these areas. These trees are in addition to the trees included in the Daylight ROW Timber Sale.

Merchantable timber within the entire project limits shall become the property of the Contractor and removed.

The clearing area, within 20 feet outside of both white edgelines, will be clear-cut for motorist's safety. The work consists of cutting all vegetative material over ½" diameter including brush, plants, limbs, residual slash, hazard or unstable trees, down timber, unmerchantable timber, and merchantable timber.

All species and sizes will be removed from the clearing area. Additionally, no material will be piled within this area. Decking will not be allowed in the clearing area. The Contractor shall make arrangements for decking offsite of the project area.

In addition, the Contractor shall clear unmerchantable trees (less than 8" in diameter, measured chest high) to the top of cut slopes and to the bottom of fill slopes that extend more than 20 feet from the white edgelines. This includes only unmerchantable trees on National Forest property, not on private property. In areas where there is private property that is adjoining the highway right-of-way, the Contractor shall only clear the area that is within 33' on each side of the centerline of the roadway. The Engineer will designate the areas adjacent to private property.

All felled trees, limbs, and brush as well as other previously downed material shall be removed from the right of way and disposed of properly by the Contractor.

Material may be chipped into bark mulch size pieces at the location it is felled when possible. Chips shall be broadcast spread to a depth not to exceed 4 inches.

The Contractor is responsible for keeping the roadway clear of debris. No separate payment will be made for this work.

The Contractor shall restore and grade areas disturbed by clearing activities including ruts. No separate payment will be made for this work.

Brush and trees shall be cut to a maximum height of 4" above the ground.

Hazard dead or unstable live trees outside the 20' clearing limits, but within 50 feet of the road edge shall be felled and removed. This includes only trees on National Forest property and within the highway right-of-way, not on private property.

All costs for clearing, disposal, and other work as described in this section, "CLEARING", shall be incidental to the contract unit price per Lump Sum for "Clearing".

STATE OF	PROJECT	SHEET	TOTAL SHEETS	
SOUTH DAKOTA	385-451	3	5	

PROJECT STATE OF SOUTH DAKOTA SHEET 4 385-451 Plotting Date: 03/27/2012 Daylight ROW Settlement **Daylight ROW Settlement** Northern Hills Ranger District Northern Hills Ranger District Black Hills National Forest **Black Hills National Forest** Sale Area Map 1 of 2 Sale Area Map 2 of 2 1) ITM-B Legend Approximate ROW Area Blue Cut Tree Marking, GC9, WO-1# Forest Service Road Couny Road U.S. Highway Legend Other Ownership Approximate ROW Area Blue Cut Tree Marking, GC9, WO-1# Forest Service Road Couny Road U.S. Highway Other Ownership Prepared By Jose Peck Date: VEX2012

The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated shall be used where there are distracting situations; such as: vehicles parked on shoulder, vehicles accessing the work site via the highway, and equipment traveling on or crossing the roadway to perform work operations.

The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

* If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.

I	Posted Speed	Spacing of Advance Warning Signs (Feet)
	Prior to Work	Warning Signs
	(M.P.H.)	(Feet)
	l I	(A)
	0 - 30	200
A	35 - 40	350
	45 - 50	500
'	55	750
	60 - 75	1000
	/work/	
	SPACE	
		A
		1
	٠	<u> </u>
	1	
	70010	
	ROAD	
	WORK	'
	AHEAD	
	AFIEAU	
,		
Αl		
·		
'	'	July 1, 2005

S D D O T

GUIDES FOR TRAFFIC CONTROL DEVICES WORK BEYOND THE SHOULDER PLATE NUMBER 634.01

Published Date: 2nd Qtr. 2012

Sheet | of |

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH			UNEETO
DAKOTA	385-451	5	5

