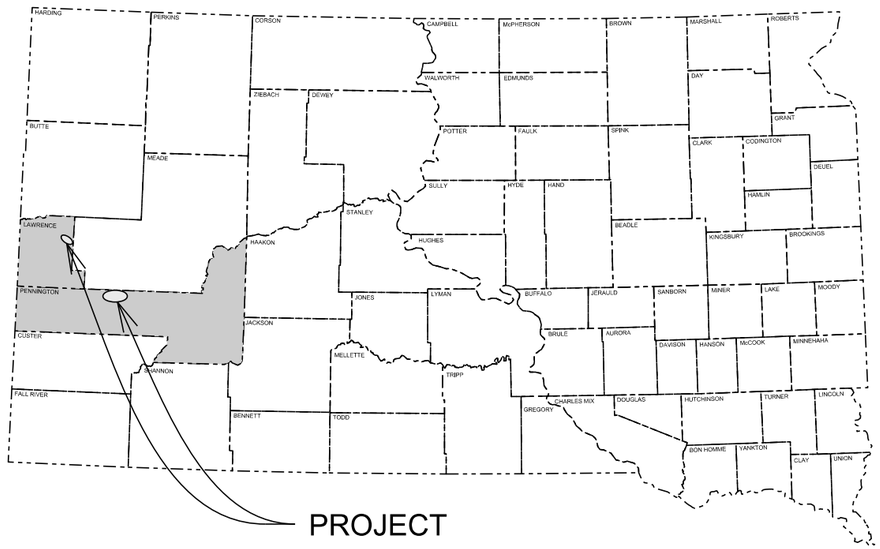


Plot Scale - 1:200

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED

PROJECTS 090 E-451, 090 W-451, 090 E-452, 090 W-452, 016EB-452, 016WB-452, & 044 E-452

INTERSTATE 90, US HIGHWAY 16B, & SD HIGHWAY 44

LAWRENCE & PENNINGTON COUNTY

PAVEMENT FOAM JACKING

PCN i3qw, i3qx, i3qv, i3qy, i3r0, i3r1, & i3r2

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	090 E-451, 090 W-451, 090 E-452, 090 W-452, & etc.	1	4

Plotting Date: 02/26/2015

INDEX OF SECTIONS

① 090E - 451, PCN i3qw
MRM 26.1 - MRM 27.1
DESIGN DESIGNATION

ADT (2014)	5160
ADT (2034)	8633
DHV	1122
D	50 %
T DHV	9.7 %
T ADT	21.3 %
V	75 MPH

② 090W - 451, PCN i3qx
MRM 22.9 to MRM 27.1
DESIGN DESIGNATION

ADT (2014)	5157
ADT (2034)	8628
DHV	1121
D	50 %
T DHV	9.7 %
T ADT	21.3 %
V	75 MPH

③ 090E - 452, PCN i3qv
MRM 63.1
DESIGN DESIGNATION

ADT (2014)	13265
ADT (2034)	17125
DHV	1884
D	50 %
T DHV	4.8 %
T ADT	10.6 %
V	65 MPH

④ 090W - 452, PCN i3qy
MRM 58.3 to MRM 60.9
DESIGN DESIGNATION

ADT (2014)	16167
ADT (2034)	20871
DHV	2171
D	50 %
T DHV	4.4 %
T ADT	9.8 %
V	65 MPH

⑤ 016EB - 452, PCN i3r0
MRM 64.5 to MRM 68.8
DESIGN DESIGNATION

ADT (2014)	4210
ADT (2034)	7333
DHV	909
D	50 %
T DHV	4.8 %
T ADT	10.5 %
V	45 & 60 MPH

⑥ 016WB - 452, PCN i3r1
MRM 64.5 to MRM 67.9
DESIGN DESIGNATION

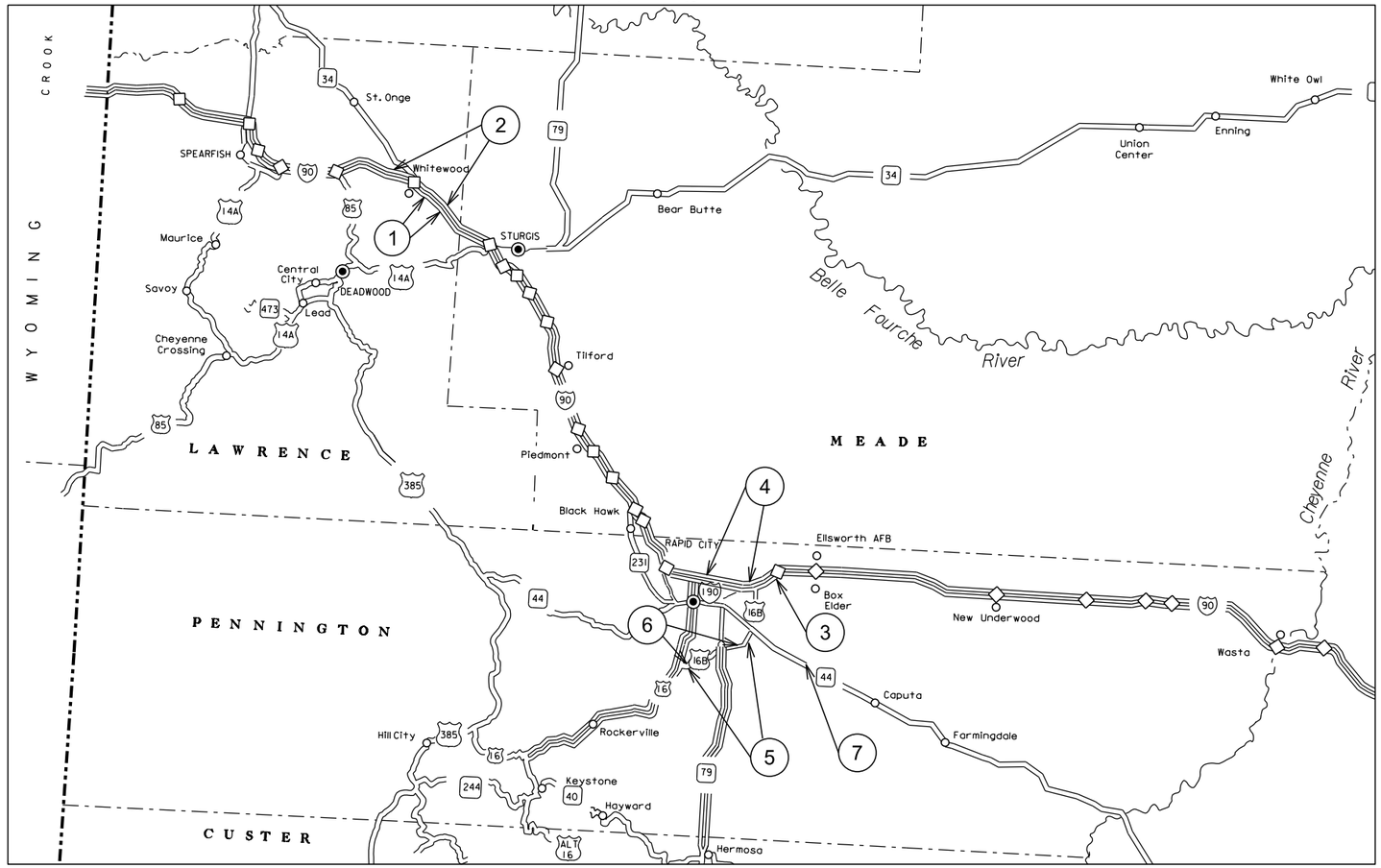
ADT (2014)	3998
ADT (2034)	6964
DHV	864
D	50 %
T DHV	4.5 %
T ADT	10 %
V	45 & 60 MPH

⑦ 044E - 452, PCN i3r2
MRM 54.0
DESIGN DESIGNATION

ADT (2014)	2360
ADT (2034)	3424
DHV	414
D	51 %
T DHV	0.9 %
T ADT	1.9 %
V	65 MPH

STORM WATER PERMIT

None Required



Plotted From - trrc11610

File - ...\RC Foam Jacking\Title.dgn

ESTIMATE OF QUANTITIES (090 E - 451, PCN i3qw)

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	1,098	Lb

ESTIMATE OF QUANTITIES (090 W - 451, PCN i3qx)

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	1,347	Lb

ESTIMATE OF QUANTITIES (090 E - 452, PCN i3qv)

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	282	Lb

ESTIMATE OF QUANTITIES (090 W - 452, PCN i3qy)

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	3,857	Lb

ESTIMATE OF QUANTITIES (016 EB 452, PCN i3r0)

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	3,507	Lb

ESTIMATE OF QUANTITIES (016 WB - 452, PCN i3r1)

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	7,928	Lb

ESTIMATE OF QUANTITIES (044 E -452, PCN i3r2)

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	728	Lb

SPECIFICATIONS

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

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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 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.

Action Taken/Required:

The Contractor shall obtain the necessary permits from the regulatory agencies such as the Department of Environment and Natural Resources (DENR) and the United States Army Corps of Engineers (COE) prior to executing water extraction activities.

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.

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.

SCOPE OF WORK

Work on this project involves correcting the pavement profile with Pavement Jacking Foam.

PAVEMENT JACKING FOAM QUANTITIES

Due to the dollar amount budgeted for this work; the locations of pavement jacking shall be done in the order of the priority number provided in the tables, starting with #1. The Engineer reserves the right to eliminate locations once the budgeted dollar amount is exceeded.

TABLE OF PCC PAVEMENT JACKING FOAM (I-90 E, PCN i3qw)

Highway	MRM	PCC Pavement Jacking Foam (Lb)	Priority #
I-90 E	26.1	588	3
I-90 E	27.1	510	3
	Total	**1,098**	

TABLE OF PCC PAVEMENT JACKING FOAM (I-90 W, PCN i3qx)

Highway	MRM	PCC Pavement Jacking Foam (Lb)	Priority #
I-90 W	27.1	910	3
I-90 W	22.9	437	3
	Total	**1,347**	

TABLE OF PCC PAVEMENT JACKING FOAM (I-90 E, PCN i3qv)

Highway	MRM	PCC Pavement Jacking Foam (Lb)	Priority #
I-90 E (Ramp)	63.1	282	4
	Total	**282**	

TABLE OF PCC PAVEMENT JACKING FOAM (I-90 W, PCN i3qy)

Highway	MRM	PCC Pavement Jacking Foam (Lb)	Priority #
I-90 W	60.605	273	5
I-90W	60.86	273	5
I-90 W	58.3	3,311	5
	Total	**3,857**	

TABLE OF PCC PAVEMENT JACKING FOAM (US 16B EB, PCN i3q0)

Highway	MRM	PCC Pavement Jacking Foam (Lb)	Priority #
US 16B EB(Sleeper Slab)	67.89	1,141	6
US 16B EB(Sleeper Slab)	67.84	1,092	6
US 16B EB	68.81	291	1
US 16B EB	65.60	437	1
US 16B EB	64.50	546	1
	Total	**3,507**	

TABLE OF PCC PAVEMENT JACKING FOAM (US 16B WB, PCN i3q1)

Highway	MRM	PCC Pavement Jacking Foam (Lb)	Priority #
US 16B WB	68.80	291	1
US 16B WB(Sleeper Slab)	67.89	840	6
US 16B WB(Sleeper Slab)	67.84	819	6
US16B WB	65.70	553	1
US 16B WB(Sleeper Slab)	67.66	2,625	7
US 16B WB	64.50	2,800	1
	Total	**7,928**	

TABLE OF PCC PAVEMENT JACKING FOAM (SD 44 EB, PCN i3q2)

Highway	MRM	PCC Pavement Jacking Foam (Lb)	Priority #
44 EB	53.95	728	2
	Total	**728**	

TRAFFIC CONTROL

1. All work activities shall be completed from the hours of 9:00 am to 4:00 pm on Interstate 90 between MRM's 52.4 and 64.4. Traffic control shall be removed and all lanes shall be open and unimpeded at the end of each day.

2. Requests to deviate from the sequence of operations shall be submitted in writing to the Engineer for review. Approval of an alternate sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work. An alternate sequence shall be submitted for review a minimum of one week prior to potential implementation.

3. Traffic control will be accomplished by DOT personnel. The Contractor shall coordinate with DOT personnel at least one week prior to the start of construction. The Maintenance Supervisor for the Sturgis unit is Greg Boness, 605-347-1978. The Maintenance Supervisor for the Rapid City unit is Bob Smith, 605-381-7174.

4. Unless otherwise stated in these plans, no work will be allowed during hours of darkness. Hours of darkness are defined, as ½ hour after sunset until ½ hour before sunrise.

5. Storage of vehicles and equipment shall be as near the right-of-way as possible. Contractor's employees should mobilize at a location off the right-of-way and arrive at the work sites in a minimum number of vehicles necessary to perform the work. Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage of the vegetation, surfacing, embankment, delineators, and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.

6. All materials and equipment shall be stored a minimum distance of 30' from the traveled way during nonworking hours.

7. Vehicles working in traffic or alongside traffic shall be equipped with a flashing amber light visible from all directions. The amber light shall be mounted on the uppermost part of the contractor's vehicle. Lights must have peak intensity within the range of 40 to 400 candelas and must flash at 75 ± 15 flashes per minute. Vehicle flasher/hazard lights are not acceptable.

8. All construction operations shall be conducted in the general direction of traffic movement.