

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	016EB-452, 016WB-452, & etc.	1	4

Plotting Date: 04/24/2018

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED**

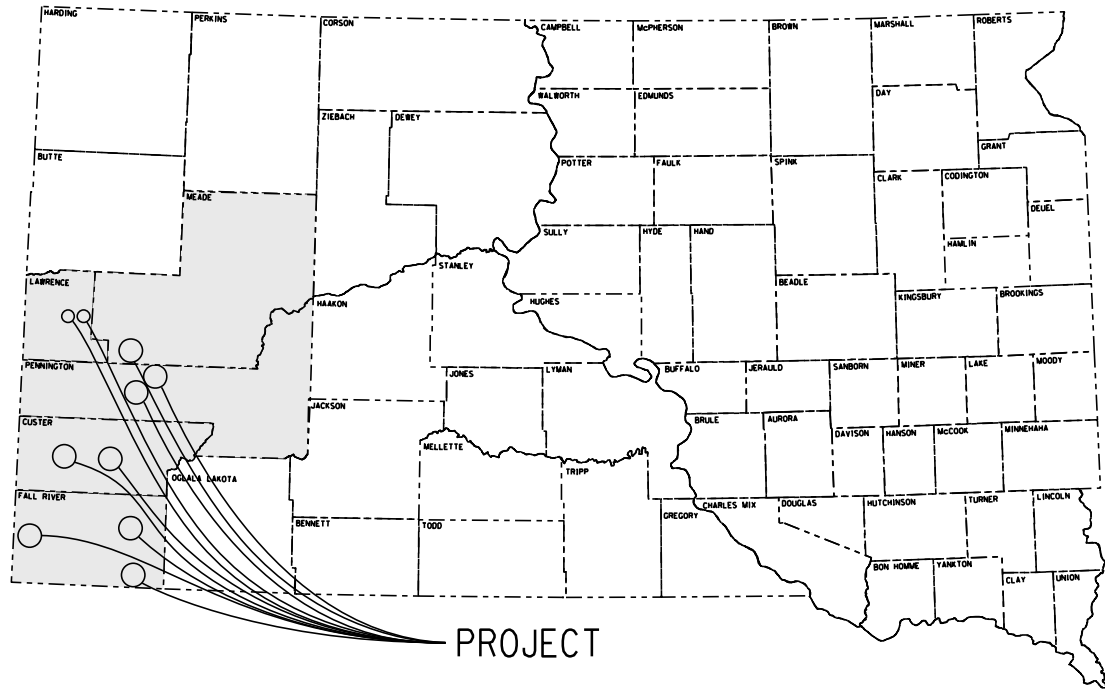
**PROJECTS 090E-452, 090W-452, 016EB-452, 016WB-452, 445-452,
090W-451, 085-451, 079S-492, 079N-492, 385N-492, 385-491
018-492 & 018W-492**

**INTERSTATE 90, US Highways 16B, 18, 85 & 385
SD Highways 79 & 445**

**PENNINGTON, LAWRENCE, MEADE,
CUSTER & FALL RIVER COUNTIES**

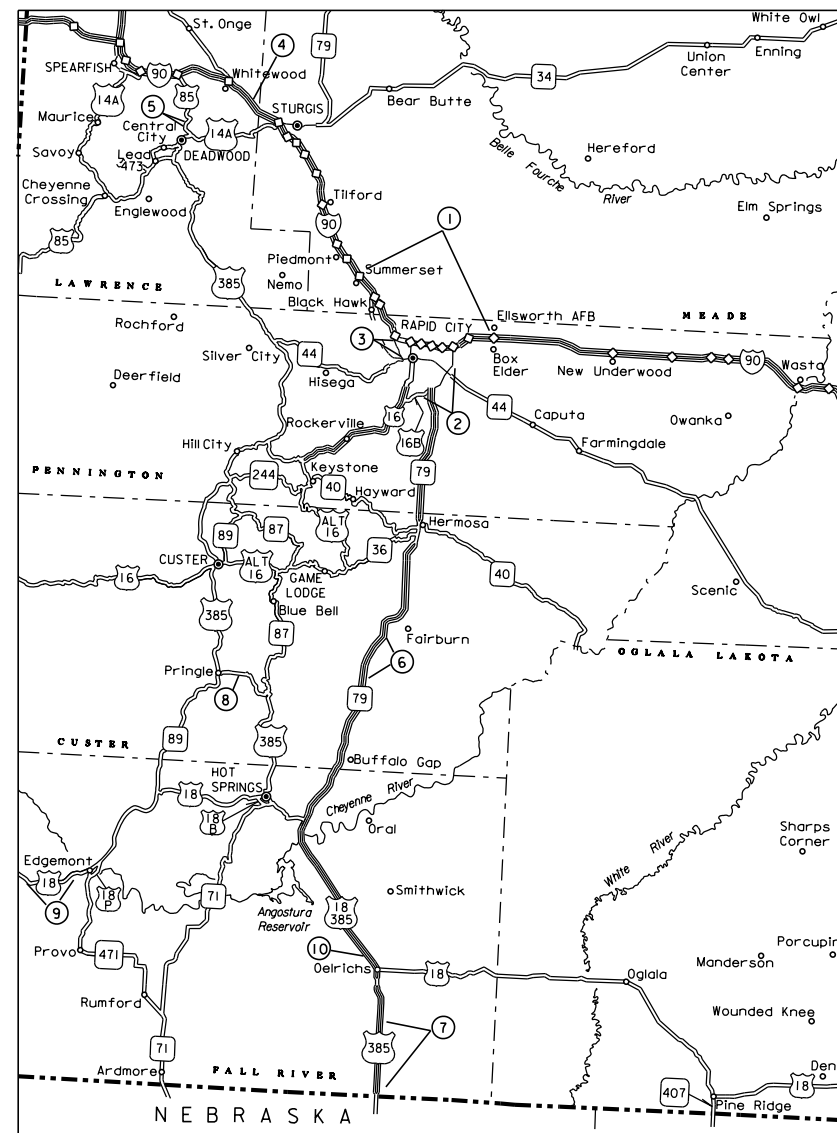
PAVEMENT FOAM JACKING

**PCNS i58d, i58j, i58k, i58h, i58f, i58g, i58l, i58m, i58p,
i58n, i58q, & i58r**



PROJECT

- ① I-90E, MRM 52.0 to MRM 63.1, 090E-452, PCN i58d
- I-90W, MRM 60.6 to MRM 61.9, 090W-452, PCN i58e
- ② US16B E, MRM 68.8 to MRM 71.8, 016EB-452, PCN i58f
- US16B W, MRM 71.0 to MRM 73.2, 016WB-452, PCN i58g
- ③ SD445, MRM 75.2 to MRM 76.4, 445-452, PCN i58h
- ④ I-90 W, MRM 26.4 to 26.5, 090W-451, PCN i58j
- ⑤ US85, MRM 32.0 to MRM 34.7, 085-451, PCN i58k
- ⑥ SD79 S, MRM 44.4 to MRM 48.4, 079S-492, PCN i58l
- SD79 N, MRM 44.9 to MRM 44.9, 079N-492, PCN i58m
- ⑦ US385 N, MRM 1.7 to MRM 5.1, 385N-492, PCN i58n
- ⑧ US385, MRM 53.9 to MRM 53.9, 385-491, PCN i58p
- ⑨ US18, MRM 1.3 to MRM 8.2, 018-492, PCN i58q
- ⑩ US18 W, MRM 60.8 to MRM 60.8, 018W-492, PCN i58r



INDEX OF SHEETS

Sheets 1: Title Sheet
Sheet 2-4: Estimate of Quantities & Plan Notes



Storm Water Permit
No Permit Required

PLOT SCALE - 1:200

PLOTTED FROM - TRRC11951

PLOT NAME -

FILE - ... \FOAM JACKING\158D-TITLE.DGN

ESTIMATE OF QUANTITIES (I-90 E, PCN i58d)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	1,674	Lb

ESTIMATE OF QUANTITIES (I-90 W, PCN i58e)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	1,107	Lb

ESTIMATE OF QUANTITIES (I-90 W, PCN i58j)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	1,674	Lb

ESTIMATE OF QUANTITIES (US85, PCN i58k)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	815	Lb

ESTIMATE OF QUANTITIES (SD445, PCN i58h)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	1,549	Lb

ESTIMATE OF QUANTITIES (US16 EB, PCN i58f)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	4,120	Lb

ESTIMATE OF QUANTITIES (US16 WB, PCN i58g)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	1,166	Lb

ESTIMATE OF QUANTITIES (SD79 S, PCN i58l)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	2,352	Lb

ESTIMATE OF QUANTITIES (SD79 N, PCN i58m)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	784	Lb

ESTIMATE OF QUANTITIES (US385, PCN i58p)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	392	Lb

ESTIMATE OF QUANTITIES (US385, PCN i58n)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	7,644	Lb

ESTIMATE OF QUANTITIES (US18, PCN i58q)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	840	Lb

ESTIMATE OF QUANTITIES (US18, PCN i58r)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
392E0210	PCC Pavement Jacking Foam	784	Lb

SPECIFICATIONS

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

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 Environment 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 completely 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 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) will 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 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 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.

SHPO/THPO review does not relieve the Contractor of the responsibility. 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.

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 i58d)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
I-90 E	52.03 Ramp	553	4
I-90 E	55.23 Both	320	4
I-90 E	60.75 PL	335	4
I-90 E	63.08 Both	466	4
Total		1,674	

TABLE OF PCC PAVEMENT JACKING FOAM (I-90 W, PCN i58e)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
090WB	61.98 Both	582	7
090WB	60.6 Both	524	7
Total		1,107	

TABLE OF PCC PAVEMENT JACKING FOAM (I-90 W, PCN i58j)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
090WB	34.41 Both	436.8	2
090WB	26.44 Both	437	2
090WB	25.74 Both	364	2
090WB	24.62 Both	437	2
Total		1,674	

TABLE OF PCC PAVEMENT JACKING FOAM (US85, PCN i58k)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
085 NB	34.7 DL	412	1
085 SB	32.01	403	1
Total		815	

TABLE OF PCC PAVEMENT JACKING FOAM (SD445, PCN i58h)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
445 SB	75.31 Both	390	3
445 SB	75.19 Both	403	3
445 NB	76.34 Both	756	3
Total		1,549	

TABLE OF PCC PAVEMENT JACKING FOAM (US16 EB, PCN i58f)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
US16B EB	68.83 Both	801	6
US16B EB	68.92 Both	641	6
US16B EB	69.22 Both	510	6
US16B EB	69.3 Both	422	6
US16B EB	69.72 Both	713	6
US16B EB	71.73 Both	699	6
US16B EB	71.75 Both	335	6
Total		4,120	

TABLE OF PCC PAVEMENT JACKING FOAM (US16 WB, PCN i58g)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
US16B WB	73.12 Both	965	5
US16B WB	71.05 PL	202	5
Total		1,166	

TABLE OF PCC PAVEMENT JACKING FOAM (SD79 S, PCN i58l)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
79 S	48.40 DL	392	1
79 S	48.40 PL	392	1
79 S	44.88 DL	392	1
79 S	44.88 PL	392	1
79 S	44.40 DL	392	1
79 S	44.40 PL	392	1
Total		2,352	

TABLE OF PCC PAVEMENT JACKING FOAM (SD79 N, PCN i58m)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
79 N	44.9 DL	392	1
79 N	44.9 PL	392	1
Total		784	

TABLE OF PCC PAVEMENT JACKING FOAM (US385, PCN i58p)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
385	53.85 NBL	392	2
Total		392	

TABLE OF PCC PAVEMENT JACKING FOAM (US385, PCN i58n)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
385 N	1.7 PL	392	1
386 N	1.7 DL	392	1
386 N	2.05 DL	392	1
386 N	2.05 PL	392	1
385 N	2.85 DL	392	1
385 N	2.85 PL	392	1
385 N	4.22 DL	392	1
385 N	4.22 PL	392	1
385 N	4.93 DL	588	1
385 N	4.96 DL	588	1
385 N	4.96 PL	588	1
385 N	5.02 DL	588	1
385 N	5.02 PL	588	1
386 N	5.04 DL	784	1
385 N	5.04 PL	784	1
Total		7,644	

TABLE OF PCC PAVEMENT JACKING FOAM (US18, PCN i58q)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
US18	1.30 EBL	420	1
US18	8.18 EBL	420	1
Total		840	

TABLE OF PCC PAVEMENT JACKING FOAM (US18, PCN i58r)

Highway	MRM/LANE	PCC Pavement Jacking Foam (Lb)	Priority #
US18 W	60.8 DL	392	1
US18 W	60.8 PL	392	1
Total		784	

TRAFFIC CONTROL

All work activities shall be completed from the hours of 9:00 am to 4:00 pm on Interstate 90 between MRM's 52.0 to and 64.0. Traffic control shall be removed and all lanes shall be open and traffic unimpeded at the end of each day.

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 unit 451 is Greg Boness, 605-

347-1978. The Maintenance Supervisor for unit 452 is Bob Smith, 605-381-7174. The Maintenance Supervisor for unit 491 is Ray McLaughlin 605-673-1304. The Maintenance Supervisor for unit 492 is Clarence Bowman 605-673-1306.

Unless otherwise stated in these plans, no work will be allowed during hours of darkness.

Non-applicable traffic control devices shall be completely covered or removed during periods of inactivity. Periods of inactivity shall be defined as no work taking place for a period of more than 48 hours.

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

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD – whichever is more stringent shall be used, as determined by the Engineer.

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