

	STATE OF	PROJECT		SHEET	TOTAL SHEETS
SES ONLY	SOUTH DAKOTA	NH-CR-EM 0018(195)103		
	Britto Int	P 0407(00)01		C1	C39
	Plotting Date:	09/12/2024	Revised 09/1	1/2024 D	JO
IN	IDEX O	F SHEETS			

C1	General Layout with Index
C2-C8	Estimate with General Notes and Tables
C9	Fixed Location Signing
C10	Width Restriction Fixed Location Signing
C11	Sign Details
C12-C16	Phasing Details
C16A	Phase 5 Detour Detail
C17	Traffic Control Legend
C18-C31	Temporary Traffic Control Plans
C32-C39	Standard Plates

SECTION C ESTIMATE OF QUANTITIES

PCN 04FC

BID ITEM	ITEM	QUANTITY	UNIT
004E0010	Blading	100	Hour
260E2030	Gravel Cushion, Salvaged	2,000.0	Ton
320E1200	Asphalt Concrete Composite	500.0	Ton
634E0010	Flagging	800.0	Hour
634E0110	Traffic Control Signs	1,649.3	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	70	Each
634E0330	Temporary Raised Pavement Markers	21,220	Ft
634E0380	Tubular Marker	835	Each
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	20	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	9,505	Ft
634E0565	Remove Pavement Marking, Arrow	16	Each
634E0600	4" Temporary Pavement Marking Tape Type I	17,460	Ft
634E0640	Temporary Pavement Marking	8,489	Ft
634E0700	Traffic Control Movable Concrete Barrier	20	Each
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	40	Each
634E0750	Temporary Concrete Barrier End Protection	4	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	4	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	1	Each
634E1002	Detour and Restriction Signing	1,123.8	SqFt
634E1020	Temporary Business Signing	126.0	SqFt
634E2000	Longitudinal Pedestrian Barricade	5,000	Ft
634E2015	Temporary Pedestrian Access Route	Lump Sum	LS
634E2020	Temporary Curb Ramp	8	Each
634E2025	Longitudinal Pedestrian Barrier	700	Ft
634E2050	Temporary Sidewalk	5,000	SqFt
634E2052	Temporary Flexible Sidewalk	5,000	SqFt
634E2054	Reset Temporary Flexible Sidewalk	5,000	SqFt
734E5010	Sweeping	150	Hour

BID ITEM	ITEM	QUANTITY	UNIT
260E2030	Gravel Cushion, Salvaged	550.0	Ton
320E1200	Asphalt Concrete Composite	125.0	Ton
634E0010	Flagging	300.0	Hour
634E0110	Traffic Control Signs	487.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	11	Each
634E0330	Temporary Raised Pavement Markers	1,920	Ft
634E0380	Tubular Marker	160	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	1,840	Ft
634E0565	Remove Pavement Marking, Arrow	2	Each
634E0600	4" Temporary Pavement Marking Tape Type I	1,200	Ft
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	20	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	2	Each
634E1002	Detour and Restriction Signing	254.4	SqFt
634E1020	Temporary Business Signing	84.0	SqFt
634E2000	Longitudinal Pedestrian Barricade	650	Ft
634E2020	Temporary Curb Ramp	3	Each
634E2025	Longitudinal Pedestrian Barrier	75	Ft
634E2050	Temporary Sidewalk	150	SqFt
634E2052	Temporary Flexible Sidewalk	150	SqFt
634E2054	Reset Temporary Flexible Sidewalk	150	SaFt

SEQUENCE OF OPERATIONS

734E5010 Sweeping

PCN 06N3

See Section-C Phasing Details for Sequence of Operations.

Contractor requests to deviate from the sequence of operations will 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 will be submitted for review a minimum of one week prior to potential implementation.

The Contractor will phase construction so all utility work will be started at the lowest point and working "uphill" in direction.

The Contractor will always maintain access to all businesses throughout construction. Consecutive intersecting city streets will not be closed.

The Contractor will not close sidewalks without having alternative routes constructed and operational. All routes will be ADA compliant.

Individual phases will be considered completed when all concrete mainline, curb and gutter, and sidewalk have been completed.

GENERAL TRAFFIC CONTROL

The subsequent Section C sheets show examples and expectations of the traffic control, TPAR and related traffic control devices. The actual traffic control and TPAR setup through the duration of the project will be dependent on the actual field conditions.

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

All temporary traffic control sign locations will be set in the field by the Contractor and verified by the Engineer prior to installation.

All temporary speed limit signs will have a minimum mounting height of 7 feet in urban locations, even when mounted on portable supports.

Portable sign supports will not be located on sidewalks, bicycle facilities, or other areas designated for pedestrian or bicycle traffic.

All construction oper movement.

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

Unless otherwise sta of darkness.

50

Hour

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made.

All fixed location signs, signposts, and breakaway bases will be removed within 7 calendar days following pavement marking.

All haul trucks will be equipped with an additional flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights will be incidental to the various related contract items.

A vertical drop-off of 8.5 inches or the thickness of the PCC Pavement will be allowed overnight only when dowel bar assembly installations prohibit construction of a wedge adjacent to the existing pavement and paving operations will be performed the following calendar day. Otherwise, no vertical drop-off including pipe and utility excavations of greater than 3 inches will be left overnight adjacent to the traveled way. The Contractor will utilize embankment material to ensure a 3-inch vertical drop-off is not exceeded. The slope of the embankment material will not be steeper than a 3:1 within 30 feet of the traveled way. No separate payment will be made for constructing these slopes.

	STATE OF		SHEET	TOTAL SHEETS
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All construction operations will be conducted in the general direction of traffic

Unless otherwise stated in these plans, work will not be allowed during hours

FOR B

GENERAL TRAFFIC CONTROL, CONTINUDED

The Contractor will furnish, install, maintain, and remove TRUCK CROSSING (W8-6) signs outside of the work limits daily. The TRUCK CROSSING signs will be displayed always when haul vehicles are hauling material. When hauling conditions no longer exist, the signs will be covered or removed from view. The exact number and location will be determined during construction. Payment for additional signs will be based on the contract unit price per square foot for "Traffic Control Signs".

The Contractor will notify businesses/homeowners a minimum of two weeks prior to construction to inform them of upcoming construction and again a minimum of 48 hours prior to any blocked access to make appropriate arrangements.

Hauling materials to and from the project site will be conducted in a safe manner by utilizing flaggers and appropriate traffic control devices to control traffic.

Construction materials and equipment will not be unloaded from lanes open to traffic.

Parking of equipment during non-working hours will be in locations that do not hinder the visibility of or access to adjacent businesses.

The Contractor will coordinate with the Engineer prior to any driveway, sidewalk, or utility replacement work that will affect access and will minimize disruptions. This may require grading and temporary gravel surfacing.

TRAFFIC CONTROL SIGNING IN NEBRASKA

All traffic control signing installed in the state of Nebraska will be installed on breakaway perforated tube posts. All costs associated with furnishing, installing, and removing these perforated tube posts will be incidental to the contract unit price per square foot for "Detour and Restriction Signing".

TRAFFIC CONTROL, MISCELLANEOUS

On unfinished grades, reflectorized devices (drums or grabber cones) defining the outside edges of the roadway will be placed every 25' (minimum) during the hours of darkness and during the davtime hours at inactive locations where grading work is not being performed. Centerline at these locations will be defined by reflectorized devices (grabber cones) placed at 25' intervals. (minimum)

Minimum width for one-way operations is 11'; two-way operations is 22' or as specified.

Driveways, streets, and roadways that enter the project will be delineated such that they are clearly visible during all hours. Freestanding, reflective traffic control drums and/or grabber cones will be used. Cost for this delineation will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

WEEKLY PROJCET MEETINGS

The Contractor will schedule weekly project meetings to discuss scheduling/coordination, impacts, and issues while work is in progress. Additional meetings may be required during periods of inactivity.

TEMPORARY SURFACING

It is anticipated that existing surfacing will need to be removed in areas that are being used to accommodate traffic. Typical surfacing removal activities may include but not limited to construction of utilities, storm sewer, and phased surfacing tie-ins to areas required to accommodate the traffic adequately and safely.

An estimated quantity of 250 Tons of Asphalt Concrete Composite and 2000 tons Gravel Cushion, Salvaged have been added to the Estimate of Quantities. This quantity may be adjusted according to field conditions and Contractor operations.

An estimated quantity of 250 tons of Asphalt Concrete Composite have been added for patching and strengthening for existing surfacing in the Phase 5 Detour route. See Phase 5 Detour Detail Sheet for more information.

Temporary Surfacing (Asphalt Concrete Composite) will be used as shown in the Temporary Traffic Control Plans and as directed by the Engineer. Temporary Surfacing (Asphalt Concrete Composite) will consist of 6" of Gravel Cushion, Salvaged and 4" of Asphalt Concrete Composite. Virgin Gravel Cushion will be substituted when Gravel Cushion, Salvaged is not available.

Temporary Surfacing (Gravel Cushion, Salvaged) may be used in pavement removal areas that are being used to accommodate traffic, maintain access and at the direction of the Engineer.

All costs associated with the installation, maintenance, and removal of the Temporary Surfacing will be incidental to the contract unit price for Unclassified Excavation (refer to Section B), Gravel Cushion, Salvaged (or Gravel Cushion), and Asphalt Concrete Composite (refer to Section F - Table of Quantities under Traffic Control Surfacing).

TEMPORARY PAVEMENT MARKING TAPE TYPE 1

Temporary Pavement Marking for stop bars will consist of 4" Temporary Pavement Marking Tape Type I. Placement of each 24" white stop bar will be accomplished by placing six pieces of 4" x 12' tape adjacent to one another. Each workspace requires two stop bars which is an equivalent of approximately 144' of 4" tape (2 workspaces at 144' - 288').

Temporary Pavement Marking for white crosswalk bars will consist of 4" Temporary Pavement Marking Tape Type I. Placement of each 8" crosswalk bar will be accomplished by placing two pieces of 4" tape adjacent to one another. Each crosswalk requires two parallel 8" bars. Length of each bar will be determined by the field conditions and actual placement of each crosswalk.

All costs to furnish, install, maintain (including replacement as required by the Engineer at no added cost to the Department), and remove the temporary pavement marking tape Type 1 will be included in the contract price per foot per 4" line or equivalent for "4" Temporary Pavement Marking Tape Type 1".

PC	PCN 06N3 - TEMPORARY PAVEMENT MARKING TAPE TYPE 1			
	ESTIMATED QUANTITY (Ft)			
PHASE	WHITE			
Phase 2	600			
Phase 6	600			
TOTAL=	TOTAL= 1,200			

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DDING PURPOSE		P 0407(00)01	C3	C39			
	Revised ()9/12/2024 DJO					
PCN 04FC - TEMF	ORARY PAVEMEN	T MARKING TAPE TYPE 1					
	ESTIMATED QUANTITY (Ft)						
PHASE		WHITE					
Phase 1		660					
Phases 2, 3A & 3B		5,000					
Phase 4		6,500					
Phase 5 4,500							
Phase 6	Phase 6 800						
TOTAL=		17,460					

BUMP MARKERS

Orange bump markers will be placed adjacent to the bump location. The bump marker details are shown in the following drawing. The steel delineator post will be a 1.12 lb/ft flanged channel steel post for ground mounted installation. If the duration is less than 3 days, the Type 1 Object Marker can be installed on temporary supports. Type 1 Object Markers need to be back-to-back for twoway traffic operations.

BUMP (W8-1) signs with appropriate ADVISORY SPEED (W13-1P) plagues will be placed 500 feet in advance of the bump or as approved by the Engineer for adequate sight distance.

All costs for bump markers, bump signs, and advisory speed plaques will be incidental to the contract unit price per square foot for "Traffic Control Signs".



FLAGGING

Traffic will not be delayed for a cumulative period longer than 10 minutes throughout the length of the project.

Additional flagger warning signs and flagger hours have been included in the Estimate of Quantities for use on intersecting roads. These flaggers will be used as directed by the Engineer and will be used primarily during daytime hours.

It is required that the flaggers be able to communicate with one another. If an emergency vehicle needs to pass through the project, the Contractor will be required to expedite traffic movement. All costs associated with this will be incidental to the contract.

BLADING

The Contractor will be required to blade granular road surfaces as needed to keep surfaces smooth and free of potholes. All costs associated with this work shall be incidental to the Contract Unit Price for Blading.

OVERWIDTH RESTRICTION SIGNING

The Contractor will furnish and install the overwidth restriction signs as shown in these plans. Prior to installing the signs, the Contractor will mark the sign locations and review them with the Engineer. Overwidth restriction signs will be installed on fixed location, ground mounted, breakaway supports. It will be the responsibility of the Contractor to maintain and reinstall these signs during the project as required by the construction progress. Upon completion of the project, the Contractor will remove the overwidth restriction signs. Signs will need to be removed or covered during extended periods of inactivity.

All costs for furnishing the signs, posts, and mounting hardware, and for installing, maintaining, covering, and removing the overwidth restriction signs will be incidental to the contract unit price per square foot for "Detour and Restriction Signing".

TEMPORARY BUSINESS SIGNING

The Contractor will provide business access signing during construction. The Engineer and Contractor will coordinate with businesses to determine sign legend and placement within the project limits. Business access signs shall be placed where they will be visible while travelling in both directions along the roadway. All costs for the Contractor's coordination efforts and activities will be incidental to the contract lump sum price for Traffic Control, Miscellaneous.

All costs for furnishing, installing, maintaining, relocating, and removal of business access signing and supports shall be paid for by the contract unit price per square foot for Temporary Business Signing.

TRAFFIC CONTROL MOVABLE CONCRETE BARRIERS

Concrete barriers will be provided by the State and are available for pickup from the SDDOT Maintenance Yard located adjacent to Hwy 79 approximately two miles south of Rapid City and returned to the same location when they are no longer needed on the project.

Barriers to be adjusted or moved will be disconnected from adjacent barriers to minimize damage to connecting pins. Pins damaged by the Contractor will be replaced at no cost to the Department.

Concrete barrier sections will be placed as depicted in the plans to comply with clear zone requirements and as required by the Engineer. The barriers will be pinned and bolted together as directed by the Engineer.

All costs associated with picking the barriers up from the SDDOT Maintenance Yard, transporting, setting, connecting, and hauling them back to the SDDOT Maintenance Yard will be incidental to the contract unit price per each for Traffic Control Movable Concrete Barrier.

After the initial placement, the concrete barriers may need to be adjusted. Adjustment of the barriers, where they do not need to be loaded on a truck for transport, will be incidental to the contract unit price per each for Traffic Control Movable Concrete Barrier. All costs associated with removing, loading, unloading, and resetting of the barriers at a new site, will be incidental to the contract unit price per each for Remove and Reset Traffic Control Movable Concrete Barrier. No additional payment will be made for barriers that are not immediately reset at a new location on the project and stored on-site until they are either reset on the project or returned to the SDDOT as indicated in these plans.

TEMPORARY CONCRETE BARRIER END PROTECTION

Crash attenuators meeting the requirements of NCHRP 350 or MASH TL-3 will be furnished and installed by the Contractor. Attachment of the attenuators to the concrete barriers will be by approved methods.

All costs associated with furnishing, transporting, initial setup, connecting, maintaining, and removing the crash attenuators will be incidental to the contract unit price per each for Temporary Concrete Barrier End Protection.

All costs associated with moving and resetting crash attenuators to accommodate traffic flows after initial set-up will be paid for at the contract unit price per each for Remove & Reset Temporary Concrete Barrier End Protection. All costs associated with removing from initial placement and resetting at a new location will be incidental to the contract unit price per each. No additional payment will be made for crash attenuators that are not immediately reset at a new location on the project and stored on-site until they are either reset or removed from the project as determined by the Engineer. No additional payment will be made for minor adjustments.

The Contractor will have replacement hardware available so that in the event the crash attenuator is hit and made unusable, the crash attenuator can be made functional within 24 hours. The cost of replacement will be incidental to the contract unit price per each for Temporary Concrete Barrier Module Set or Repair Kit. No payment will be made for the Temporary Concrete Barrier Module Set or Repair Kit if no repairs are necessary. Upon completion of the project, crash attenuators will remain the property of the Contractor.

A linear delineation system (LDS) panel will be attached to each barrier section. The color will be the same as the nearest pavement marking, white along outside edge lines or yellow for the left side on one way traffic sections. The LDS will be 34 inches long and 6 inches in height and be constructed of aluminum formed into a shape to provide retroreflective properties across a wide range of angles. It will be sheeted with sheeting meeting the requirements of ASTM D4956 Type XI. The panels will be evenly spaced, with the top of the panel 4 inches below the top of the barrier. Installation will be as per the manufacturer's recommendations. This will allow for easy removal for replacement of damaged panels or to replace with an alternate color. The Contractor will furnish and install one panel along each side of the barrier if any panels are missing from the barriers. Replacement of damaged linear delineation system panels will be furnished and replaced by the Contractor. All costs associated with furnishing, installing, and replacing, if needed, will be incidental to the contract unit price per each for Linear Delineation System Panel, Barrier Mounted.

All LDS panels will remain attached to the barrier sections and will become the property of the State of South Dakota upon completion of the project.

The Contractor will verify the number of LDS panels that will need to be installed or replaced on the Traffic Control Movable Concrete Barriers. The contract amount of LDS panels is an estimate, and the full contract amount may not be needed.

Maintaining the linear delineation system, including moving LDS panels from one side of the barrier to the other side of the barrier to match the applicable color of the nearest pavement marking will be incidental to the contract lump sum price for Traffic Control, Miscellaneous.

			SHEET	TOTAL SHEETS
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Revised 07-15-24 DJO

BARRIER MOUNTED LINEAR DELINEATION SYSTEM PANELS

CONVENTIONAL ROAD

SOFT

	PCN	04FC -		CONTROL	. SIGNS
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SIGN

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-1	STOP	1	30"	5.2	5.2
R1-3P	ALL WAY (plaque)	1	18" x 6"	0.8	0.8
R2-1	SPEED LIMIT 25	1	24" x 30"	5.0	5.0
R2-1	SPEED LIMIT 40	1	24" x 30"	5.0	5.0
R2-6aP	FINES DOUBLE (plaque)	1	24" x 18"	3.0	3.0
R4-7c	(Narrow) KEEP RIGHT (symbol)	9	18" x 30"	3.8	34.2
R8-3	NO PARKING (symbol)	2	24" x 24"	4.0	8.0
R9-8	PEDESTRIAN CROSSWALK	3	36" x 18"	4.5	13.5
R9-9	SIDEWALK CLOSED	2	24" x 12"	2.0	4.0
R9-10	SIDEWALK CLOSED (ARROW L or R) USE OTHER SIDE	2	24" x 12"	2.0	4.0
R9-11	SIDEWALK CLOSED AHEAD (ARROW L or R) CROSS HERE	2	24" x 18"	3.0	6.0
R9-11a	SIDEWALK CLOSED (ARROW L or R) CROSS HERE	2	24" x 12"	2.0	4.0
R11-2	ROAD CLOSED	2	48" x 30"	10.0	20.0
R11-4	ROAD CLOSED TO THRU TRAFFIC	1	60" x 30"	12.5	12.5
W3-5	SPEED REDUCTION AHEAD (25 MPH)	1	48" x 48"	16.0	16.0
W3-5	SPEED REDUCTION AHEAD (40 MPH)	1	48" x 48"	16.0	16.0
W11-2	PEDESTRIAN (symbol)	12	36" x 36"	9.0	108.0
W16-7P	DOWNWARD DIAGONAL ARROW (plaque)	6	24" x 12"	2.0	12.0
W16-9P	AHEAD (plaque)	6	30" x 18"	3.8	22.8
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
W20-3	ROAD CLOSED AHEAD	4	48" x 48"	16.0	64.0
G20-2	END ROAD WORK	6	36" x 18"	4.5	27.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			487.

PCN 06N3 – TEMPORARY BUSINESS SIGNING

_			CONVENTIO	NAL ROAD	
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
SPECIAL	BUSINESS ACCESS SIGN	8	36" x 12"	3.0	24.0
SPECIAL	BUSINESS ACCESS SIGN	4	36" x 24"	6.0	24.0
SPECIAL	BUSINESS ACCESS SIGN	4	36" x36"	9.0	36.0
		CON	VENTIONAL CONTROL S	ROAD IGNS SQFT	84.0

PCN 06N3 - DETOUR AND RESTRICITON SIGNING

ITEMIZED LIST FOR DETOUR AND RESTRICTION SIGNING

		- 0	CONVENTIO	NAL ROAD	1
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
SPECIAL SPECIAL	NO VEHICLES OVER 10 FT WIDE WIDTH RESTRICTION 10 FT WIDE XX MILES AHEAD	1 3	120" x 36" 138" x 78"	30.0 74.8	30.0 224.4
	•	CON	VENTIONAL IR AND REST SIGNING SQI	ROAD RICTION	254.4

Signs will need to be removed or covered during extended periods of inactivity.

PAVEMENT MARKING REMOVAL (4" or Equivalent)					
Route/Phase	Location		Estimated Quantity (Ft.)		
Phase 1					
US 18	215+50 to 228+50	All Pavement Markings		3660	
Most Main	See Phase 1				
west wain	Temporary Traffic	c All Pavement Markings t		750	
51.	Control Plan sheet				
Phase 2					
		Double Yellow Centerline, WB Lef	t Turn Lane		
110 10	100+00 to 102+25	Lines, Merging Lane Lines, Merging Lane		1105	
03 16	100+00 10 102+23	Edge Lines, & EB Channelizing Line with		1195	
	White Slash Lines.				
US 18	102+25 to 126+00	EB Skip Dash Lines and EB Lane Lines		1000	
US 18	126+00 to 136+50	EB Skip Dash Lines and EB Edge Line		1500	
US 18 136+50 to 140+00 All Pavement Markings				1400	
	TOTAL=				

	PCN 04FC - PAVEMENT MARKING REMOVAL (Arrows)			
Route/Phase	oute/Phase Location Description			
Phase 1				
US 18	215+50 to 228+50	Arrows		12
West Main St.	See Phase 1 Temporary Traffic Control Plan sheet	Arrows		2
Phase 2				
US 18	100+00 to 102+25	Arrows		2
			TOTAL=	16

	PCN 06N3 - PAVEMENT MARKING REMOVAL (4" or Equivalent)				
Route/Phase	Location	Description Estimated Quantity (Fi			
Phase 2					
SD 407	209+75 to 214+75	All Pavement Markings	1840		
TOTAL= 184					

	PCN 06N3 - PAVEMENT MARKING REMOVAL (Arrows)				
Route/Phase	Route/Phase Location Description				
Phase 2					
SD 407	209+75 to 214+75	Arrows		2 Each	
			TOTAL=	2 EACH	

SIGN	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-1	STOP	11	30"	5.2	57.2
R1-3P	ALL WAY (plaque)	3	18" x 6"	0.8	2.4
R2-1	SPEED LIMIT 25	5	24" x 30"	5.0	25.0
R2-1	SPEED LIMIT 55	2	24" x 30"	5.0	10.0
R2-1	SPEED LIMIT 45	1	24" x 30"	5.0	5.0
R2-6aP	FINES DOUBLE (plaque)	2	24" x 18"	3.0	6.0
R3-1	RIGHT TURN PROHIBITION (symbol)	5	24" x 24"	4.0	20.0
R3-2	LEFT TURN PROHIBITION (symbol)	4	24" x 24"	4.0	16.0
R3-7R	RIGHT LANE MUST TURN RIGHT	1	30" x 30"	6.3	6.3
R4-7c	(Narrow) KEEP RIGHT (symbol)	21	18" x 30"	3.8	79.8
R8-3	NO PARKING (symbol)	4	24" x 24"	4.0	16.0
R9-8	PEDESTRIAN CROSSWALK	6	36" x 18"	4.5	27.0
R9-9	SIDEWALK CLOSED	6	24" x 12"	2.0	12.0
R9-10	SIDEWALK CLOSED (ARROW L or R) USE OTHER SIDE	6	24" x 12"	2.0	12.0
R9-11	SIDEWALK CLOSED AHEAD (ARROW L or R) CROSS HERE	6	24" x 18"	3.0	18.0
R9-11a	SIDEWALK CLOSED (ARROW L or R) CROSS HERE	6	24" x 12"	2.0	12.0
R11-2	ROAD CLOSED	6	48" x 30"	10.0	60.0
R11-4	ROAD CLOSED TO THRU TRAFFIC	3	60" x 30"	12.5	37.5
W1-4	REVERSE CURVE (L or R)	6	48" x 48"	16.0	96.0
W3-4	BE PREPARED TO STOP	2	48" x 48"	16.0	32.0
W3-5	SPEED REDUCTION AHEAD (25 MPH)	1	48" x 48"	16.0	16.0
W4-2	LEFT or RIGHT LANE ENDS (symbol)	2	48" x 48"	16.0	32.0
W8-1	BUMP	5	48" x 48"	16.0	80.0
W8-6	TRUCK CROSSING	2	48" x 48"	16.0	32.0
W9-3	CENTER LANE CLOSED AHEAD	2	48" x 48"	16.0	32.0
W11-2	PEDESTRIAN (symbol)	20	36" x 36"	9.0	180.0
W13-1P	ADVISORY SPEED (plaque)	7	30" × 30"	6.3	44.1
W16-7P	DOWNWARD DIAGONAL ARROW (plaque)	10	24" x 12"	2.0	20.0
W16-9P	AHEAD (plaque)	10	30" x 18"	3.8	38.0
W20-1	ROAD WORK AHEAD	20	48" x 48"	16.0	320.0
W20-3	ROAD CLOSED AHEAD	4	48" x 48"	16.0	64.0
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	2	48" x 48"	16.0	32.0
W20-5	LEFT or RIGHT LANE XX FT	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
W21-5	SHOULDER WORK	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	20	36" x 18"	4.5	90.0
-	TYPE 1 YELLOW OBJECT MARKER BACK TO BACK	5	18" x 18"	4.6	23.0
		CON	VENTIONAL CONTROL S	ROAD IGNS SQFT	1649.3

PCN 04FC - DETOUR AND RESTRICTION SIGNING

			CONVENTIO	NAL ROAD	(*
SIGN	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
SPECIAL	NO VEHICLES OVER 10 FT WIDE	3	120" x 36"	30.0	90.0
SPECIAL	WIDTH RESTRICTION 10' WIDE XX MILES AHEAD	13	138" x 78"	74.8	972.4
W20-2	DETOUR AHEAD	1	48" x 48"	16.0	16.0
M1-4	US ROUTE MARKER (1 or 2 digits)	5	24" x 24"	4.0	20.0
M3-2	DIRECTION MARKER - EAST	5	24" x 12"	2.0	10.0
M4-8	DETOUR	4	24" x 12"	2.0	8.0
M4-8a	END DETOUR	1	24" x 18"	3.0	3.0
M5-1	ADVANCE TURN ARROW 90° (L or R)	1	21" x 15"	2.2	2.2
M6-1	DIRECTION ARROW - Horizontal Single Head (L or R)	1	21" x 15"	2.2	2.2
		CON	VENTIONAL IR AND REST SIGNING SQF	ROAD RICTION	1123.8

Signs will need to be removed or covered during extended periods of inactivity.

PCN 04FC – TEMPORARY BUSINESS SIGNING

ITEMIZED LIST FOR TEMPORARY BUSINESS SIGNING

	and a second		CONVENTIO	ONAL ROAD	
SIGN CODE	SIGN SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
SPECIAL	BUSINESS ACCESS SIGN	12	36" x 12"	3.0	36.0
SPECIAL	BUSINESS ACCESS SIGN	6	36" x 24"	6,0	36.0
SPECIAL BUSINESS ACCESS SIGN	6	36" ×36"	9.0	54.0	
-		CON	CONTROL S	ROAD	126.0

	STATE OF		SHEET	TOTAL SHEETS
SES ONL	Y ДАКОТА	P 0407(00)01	C5	C39

Revised 09-12-24 DJO

PCN 06N3 - TRAFFIC CONTROL SIGNS

ITEMIZED LIST FOR TEMPORARY BUSINESS SIGNING

TEMPORARY PAVEMENT MARKING

Included in the Estimate of quantities is 8489 feet of Temporary Pavement Marking (Temporary Pavement Marking Paint).

All costs to furnish and install Temporary Pavement Marking Paint will be included in the contract price per foot "Temporary Pavement Marking".

	PCN 04FC - TEMPORARY PAVEMENT MARKING PAINT				
Route	Location	De	Description		
US 18	101+22 to 136+50	Double 4" Yel Centerline)	Double 4" Yellow (Temporary Centerline)		
US 18	122+17 to 136+50	4" White (Ten	1433		
	Total=				

TEMPORARY RAISED PAVEMENT MARKERS

Temporary raised pavement markers will be used for marking edge lines, lane lines, centerlines and traffic control tapers and as shown in the Temporary Traffic Control Plans. Temporary raised pavement markers will be used on all new permanent surfacing sections of roadway and on existing surfacing where temporary marking locations are different than existing marking locations, and as shown in the Temporary Traffic Control Plans.

Temporary raised pavement markers will be attached to the roadway surface with a flexible non-permanent bituminous adhesive capable of being removed from the roadway surface or with an adhesive approved by the Engineer.

All costs to furnish, install, replace if necessary, and remove the markers will be incidental to the contract unit price per foot for "Temporary Raised Pavement Markers".

PCN 04FC - RAISED PAVEMENT MARKERS			
DUASE	ESTIMATED QUANTITY (Ft)		
PHASE	WHITE	YELLOW	
Phase 1	220	3000	
Phase 2, 3A & 3B	1400	4900	
Phase 4	800	800	
Phase 5	1000	8000	
Phase 6	550	550	
SUB TOTAL=	3970	17250	
TOTAL=	21220		

PCN 06N3 - RAISED PAVEMENT MARKERS			
DUASE	ESTIMATED QUANTITY (Ft)		
PHASE	YELLOW		
Phase 2	480	480	
Phase 6	480	480	
SUB TOTAL=	960	960	
TOTAL=	TOTAL= 1920		

TUBULAR MARKERS

Tubular markers will be placed at locations where traffic is using existing, new, or a combination of paved surfaces, for periods exceeding 1 week. Modifications may be necessary and will be approved by the Engineer.

The color of the tubular markers on centerline will be predominately orange. The color of the tubular markers installed on the shoulders will be predominately white.

All tubular markers will be a minimum of 28 inches in height. The base of the tubular marker should be attached to the roadway surface with a flexible nonpermanent bituminous adhesive capable of being removed from the roadway surface after use. The pin used to connect the marker to the base will be of a type that will not puncture a vehicle tire if it should become dislodged from the base.

All costs for furnishing, installing, maintaining, replace if necessary, and removing the tubular markers will be incidental to the contract unit price per each for "Tubular Marker".

PCN 04FC - TUBULAR MARKERS			
ESTIMATED QUANTITY			
PHASE	PHASE WHITE ORANGE		
Phase 1	60	60	
Phases 2, 3A &3B	150	145	
Phase 4	55	50	
Phase 5	85	170	
Phase 6	30	30	
SUB TOTAL=	L= 380 455		
TOTAL= 835			

PCN 06N3 – TUBULAR MARKERS					
DUACE	ESTIMATEI	QUANTITY			
PHASE	WHITE	YELLOW			
Phase 2	20	60			
Phase 6	20	60			
SUB TOTAL=	40	120			
TOTAL=	L= 160				

STATE FURNISHED PORTABLE CHANGEABLE MESSAGE SIGN

The Contractor will inform the DOT two weeks prior to the road closure goes into effect so portable message signs (PCMS) will be installed to notify drivers of the upcoming construction and closure. The PCMS will be furnished, modified, maintained, and transported by the DOT.

PCMS.

INCIDENTS

An incident is an emergency road user occurrence, a natural disaster, or other unplanned event that affects or impedes the normal flow of traffic such as a crash, hazardous materials spill, or other event.

The Contractor will set up a meeting prior to start of work to plan and coordinate responses to an incident. The Contractor will invite the Department of Transportation, the South Dakota Highway Patrol, the Oglala Lakota County Sheriff and local emergency response entities to the meeting.

The Contractor will assist to maintain traffic as required by these plan notes and as agreed to at that meeting.

Emergency vehicle access through the project will be considered and discussed at the meeting.

The Contractor may be required to provide flaggers to direct or detour traffic. The Contractor should be prepared to relocate advance warning signs if determined to be necessary for a major traffic incident lasting more than two hours. Fixed location ground mounted signs may be covered, and additional portable signs provided.

Cost for the relocation of an advance warning sign due to an incident will be 50% of the designated sign rate. Flaggers will be paid for at the contract unit price per hour for "Flagging".

PRESS RELEASE ANNOUNCEMENTS

The SDDOT will prepare a press release to be released 5 days prior to any phase change or any other major change that affects traffic flow. The SDDOT will be responsible to keep law enforcement, emergency services, and the traveling public notified of changes in project access. The Contractor will provide the Engineer with pertinent information 7 days prior to any phase change or any other major change that affects traffic flow.

	STATE OF		SHEET	TOTAL SHEETS
SES ONL		P 0407(00)01	C6	C39

Revised 07-15-24 DJO

When work begins that will affect traffic patterns, the State will remove the

LONGITUDINAL PEDESTRIAN BARRIER

When used to separate pedestrians from vehicular traffic for TPARs in the roadway, longitudinal pedestrian barrier must meet or exceed the crashworthy requirements of NCHRP 350 or MASH Test Level 1 [for posted speeds less than 35 mph] 2 or 3 [for posted speeds of 35 mph or greater]. The bottom and top surfaces of the traffic side of devices will have retroreflective sheeting or delineation for improved nighttime visibility.

When longitudinal pedestrian barriers are combined in a series, the maximum gap between devices that do not interlock will be one inch. Joints between devices that do interlock should be closed and flush to prevent canes or small wheels from being trapped and to facilitate safe hand trailing. Channelizing devices should provide a color contrasting pattern. Black should not be used to color any base on a device. The devices should comply with the general color and stripe pattern requirements of Chapter 6F of the MUTCD.

Longitudinal pedestrian barriers will have continuous bottom and top surfaces. The top surface will be smooth to allow safe hand trailing.

The maximum length of Longitudinal Pedestrian Barrier in use on the project at one time will be the final quantity paid for the project. All costs including but not limited to relocation and maintenance of Longitudinal Pedestrian Barrier will be incidental to the contract unit price per foot for "Longitudinal Pedestrian Barrier".

LONGITUDINAL PEDESTRIAN BARRICADE

Longitudinal pedestrian barricades should not be used to provide positive protection for pedestrians.

To prevent any tripping hazard to pedestrians, ballast will be located behind or internal to the device.

When longitudinal pedestrian barricades are combined in a series, the maximum gap between devices that do not interlock will be one inch. Joints between devices that do interlock will be closed and flush to prevent canes or small wheels from being trapped and to facilitate safe hand trailing. When used as a sidewalk closure mechanism, longitudinal pedestrian barricade must run the entire width of the sidewalk. Longitudinal pedestrian barricade should provide a color contrasting pattern. Black should not be used to color any base on a device. The devices should comply with the general color and stripe pattern requirements of Section 6F.68 of the MUTCD.

Longitudinal pedestrian barricade will have continuous bottom and top surfaces. The top surface will be smooth to allow safe hand trailing. Both upper and lower surfaces will share a common vertical plane.

The maximum length of Longitudinal Pedestrian Barricade in use on the project at one time will be the final quantity paid for the project. All costs including but not limited to relocation and maintenance of Longitudinal Pedestrian Barricade will be incidental to the contract unit price per foot for "Longitudinal Pedestrian Barricade".

TEMPORARY CURB RAMP

Temporary curb ramps should be firm, stable, and have a non-slip surface. They will not warp or buckle and should be made of materials strong enough to support a weight of 800 pounds. Temporary curb ramps will be yellow or color contrasting and contain marked edges, so they are noticeable by pedestrians who have visual impairments. Lateral joints or gaps between surfaces will be a maximum of 0.5 inches in width. Temporary curb ramps will include detectable warning panels.

Temporary curb ramps will be the same width as the temporary pedestrian access route, with a recommended width of 60 inches and a minimum width of 48 inches. Temporary curb ramps will have a maximum slope of 8.3% and have free draining surfaces with a maximum cross slope of 2%. Handrails on temporary curb ramps are not required unless the curb ramp has a rise exceeding 6 inches and a length exceeding 72 inches.

All costs will be incidental to the contract unit price per each for "Temporary Curb Ramp". Every location a ramp is installed will be paid per each and ramps may be reused at multiple locations.

TEMPORARY CURB RAMP DETAILS



- 1. Curb ramps will be 48-inch minimum width with a firm, stable, and non-slip surface.
- 2. Protective edging with a 2-inch minimum height will be installed when the curb ramp or landing platform has a vertical drop of 6 inches or greater or has a side apron slope steeper than 33:1 (33%). Protective edging should be considered when curb ramps or landing platforms have a vertical drop of 3 inches or more.
- 3. Detectable edging with 6 inches minimum height and contrasting color will be installed on all curb ramp landings where the walkway changes direction (turns).

TEMPORARY CURE

- 4. Curb ramps slope.
- 5. A minimum c above and be preferred.
- 6. The curb ran 2 to 4 inch w contrasting e
- 7. Water flow in
- 8. Lateral joints width.
- 9. Changes bet Lateral edge be vertical up 0.25 inches

PEDESTRIAN CHAN



- 1.
- the walkway.
- trailing.

	STATE OF	PROJECT NH-CR-FM 0018(195)103	SHEET	TOTAL SHEETS		
SES ONL	РАКОТА	P 0407(00)01	C7	C39		
B RAMP DETAILS (Continued)						
and landings sl	nould hav	e a 50:1 (2%) maximum c	ross			
clear space of 4 elow the curb r	l8 inch x ₄ amp, with	48 inch minimum will be pr a 60 inch x 60 inch clear	ovided space			
np walkway edu ide marking. Th edging is used.	np walkway edge will be marked with a contrasting color ide marking. The marking is optional where color adging is used.					
n the gutter sys	tem will h	ave minimal restriction.				
or gaps betwe	en surfac	es will be less than 0.5 inc	hes in			
ween surface heights should not exceed 0.5 inches. s between 0.25 inches and 0.5 inches in height, should o to 0.25 inches in height and beveled at 2:1 between and 0.5 inches in height.						
NNELIZING DEVICE DETAILS						
Handrailing edge 34 - 38 in.						

Detectable edg 12 in. maximum Detectable edge 2 in maximum (3)

Longitudinal Pedestrian Barrier

Barricade rail supports may not extend into the pedestrian walkway more than 4 inches from the face of the barricade.

2. The top edge of the bottom portion will be a minimum of 8 inches above

3. Devices will not block water drainage from the walkway. A gap height or opening from the walkway surface up to a maximum of 2 inches in height is allowed for drainage purposes.

4. The top edge of the longitudinal pedestrian barricade is to be used as a guiderail to provide visual and tactile guidance to pedestrians along a designated route. The top surface should have a minimum width of 0.5 inches to allow the hand to feel the surface. The surface should be smooth and free of any sharp or abrasive elements to allow safe hand

5. Longitudinal pedestrian barrier used to provide positive protection from traffic to pedestrians should be crashworthy.

Longitudinal Pedestrian Barricade

TEMPORARY SIDEWALK

Temporary sidewalk will be a smooth, continuous, non-slip, hard surface. There should be no curbs or abrupt changes in grade or terrain that could cause tripping or be a barrier to wheelchair use.

Granular surfaces will NOT be allowed. Exceptions may be needed for small/ irregular areas (less than 10' in length).

Asphalt Concrete and/ or Portland Cement Concrete used for Temporary Sidewalk will be a minimum thickness of 2 Inches with 4 inches of compacted gravel cushion or gravel cushion, salvaged. If used, Asphalt Concrete will comply with Asphalt Concrete Composite requirements and/or Portland Cement Concrete will comply with M6 Concrete requirements.

Temporary sidewalk will have a minimum width of 48 inches, with 60 inches recommended. The Contractor will try to provide boulevard sidewalk, whenever possible, for Temporary sidewalk that is 48 inches wide. Temporary sidewalk less than 60 inches wide will provide for a 60-inch x 60-inch passing space at intervals not to exceed 200 feet. Temporary sidewalk will have a maximum cross slope of 2%. The maximum grade will be 5% where the Temporary sidewalk does not follow the grade of the road.

All costs associated with installing, maintaining and removing temporary sidewalk, including all materials, labor, and incidental work, will be included in the contract unit price per square foot for "Temporary Sidewalk".

TEMPORARY FLEXIBLE SIDEWALK

These crossings are typically utilized in an urban setting under partial width construction to facilitate frequent removal and resetting to accommodate utility and road work.

Temporary Flexible sidewalk (TFS) will be contrasting in color to clearly indicate the pedestrian walk path. Colors like the surrounding work area ground or disturbed ground will not be allowed.

TFS will be wide enough to accommodate the placement of pedestrian barricades and devices required to adequately install the TFS in place as per the manufacture installation recommendations or as approved by the Engineer. A minimum of width of 5.0' will be maintained that is clear of obstructions for pedestrian traffic.

The Contractor will provide TFS from the list below. The Contractor may submit an equivalent type of temporary flexible sidewalk mat for approval by the Department.

> 1. Mobi-Mats (Rec Path) AFX Blue Jay Deschamps Mats Systems 218 Little Falls Road, Unit 12 Cedar Grove, NJ 07009 PH# 1-973-928-3040

In addition, Temporary Flexible Sidewalk will require the following:

- 1. TFS will be installed as per the manufactures installation recommendations or as approved by the Engineer. The TFS needs to result in a taut and secure surface.
- 2. TFS placed directly on existing ground will meet all requirements for grade and cross slope as listed under "Temporary Sidewalk".
- 3. TFS placed directly on existing vegetation may result in damage to the vegetation. The vegetation will be repaired or replaced; to its original condition as approved by the Engineer, by the contractor at no cost to the State.
- 4. Flexible sidewalk will be used in conjunction with other traffic control and pedestrian traffic control items to best meet ADA compliance and as approved by the Engineer to best fit field conditions.

Measurement of the TFS will be to the nearest square foot of actual installed and utilized TFS on the project at one time (per PCN#). Excess TFS that is not used in a roll for each location/ installation will not be measured for payment.

All costs associated with ground preparation, initial installation, maintaining, and removing TFS will be included in the contract unit price per square foot for "Temporary Flexible Sidewalk".





Notes:

2. ADA Landing will be placed as required and meet typical ADA standards described in the plans

"Resetting" of the Temporary Flexible Sidewalk (TFS) will be defined as installation in a new location, as approved by the Engineer.

Reinstallation in the same location, reinstalling due to maintenance, or removing and reinstalling due to construction operations will NOT be subject to payment.

Measurement for resetting of the TFS will be to the nearest square foot of actual TFS reset on the project at one time (per PCN#). Excess TFS that is not used in a roll for each location will not be measured for payment.

All cost associated with ground preparation, resetting, maintaining, removing the TFS will be included in the contract unit price per square foot for "Temporary Flexible Sidewalk, Reset".

1. TFS is to be installed in accordance to manufacturer's reccomendations, or as approved by the Engineer.

3. Subsurface work will meet the required ADA typical slopes and cross slopes to support the TFS

4. Excess Length of TFS will require staking to prevent inadvertant moving of the roll by the public.

TEMPORARY FLEXIBLE SIDEWALK, RESET





SIGN DETAILS





Busin Acce
10.8 -14.4
9.3 -17.4
110 100

11.2	-13.6
~13.3	→ 9.4
<	- 36

PHASING DETAILS (US HWY 18 & SD 407)



Phase 1 (212+03.39 to 228+00)

- 1.
- 2. Set up Phase 1 traffic control.
- 3.
- 4.
- 5. on SD 407.
- 215+91.79 Lt to 228+00 Lt. Construct fillet, ADA improvements and 6. private access aprons.

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SES ONLY DAKOTA	P 0407(00)01	C12	C39	
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Set up traffic control. Remove existing pavement markings (215+00 to 228+00).

225+02.35 Lt. to 215+84.13 Lt. - Construct storm sewer. (Stub out past the EB Driving lane located in the NW quadrant of the SD Hwy 407/ US Hwy 18/ Main Street intersection)

Close Main Street and a portion of the SB driving lane (SD 407) as needed to complete water line installation and surfacing within the NW and SW quandrants of the SD Hwy 407/US Hwy 18/ Main Street intersection and SB driving lane on SD 407.

212+03.39 Lt. to 215+91.79 Lt. - Install water line, fillets, ADA improvements, private access aprons, and construct surfacing within the NE & SE quandrants of the SD Hwy 407/US Hwy 18/ Main Street intersection, EB driving lane US 18, and SB driving lane

Water line must be stubbed out, for tie-in after surfacing installation; past tee (to the East) at 2+52.57 (Water Line Stationing).

PHASING DETAILS (US HWY 18)



NOTE: See Temporary Traffic Control Pha Details 210+00 - 215+00 (US 18) & 100+00 - 136+50 (US 18) for additi Phase 2 detail information.

Phase 2

- 1. Set up Phase 2 traffic control.
- 2. SD Hwy 407/ US Hwy 18/ Main Stree
- 3. 100+50 Rt. Remove existing right to
- 4. 216+70.75 Rt. to 103+87.45 Lt. Re and WB merge lane. Remove existi
- 5. 101+00 Lt. to 103+87.45 Lt. Remov
- 6. 215+84.13 Lt. to 132+48.65 Lt. Con incidental removals.
- 7. 101+00 Lt. to 103+87.45 Lt. Constru
- 8. Install temporary surfacing as shown and/ or as directed by the Engineer.
- 9. 216+70.75 Rt. to 103+87.45 Lt. Cor merge lane. Construct curb & gutter
- 10. 100+21.14 Lt. to 101+00+00 Lt. Rev
- 11. 102+00 Lt. Install traffic control device movement using new right turn lane a
- 12. 100+21.14 Lt. to 101+00 Lt. Constru
- 13. 216+70.75 Rt to 228+00 Rt. Construprivate access aprons.
- 14. Install temporary surfacing to accomo (See Phase 3A Temporary Traffic Con

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	STATE OF SOUTH	NH-CR-EM 0018	B(195)103	SHEET	SHEETS
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et intersectio	n - Rem	ove existing t	raffic signa	als.	
urn lane islan	d curb &	gutter, and c	curb ramps	5.	
emove existing	g surfaci	ng in the WB	right turn	lane	
ve existing Wi	R drivina	lane	ib tamps.		
netruct storm	sower in	cluding latera	al etub oute	a and	
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ruct New WB	driving la	ane.			
n in Phase 2 T	⁻ empora	ry Traffic Cor	ntrol Plan s	sheets	6
Dotruct M/D ric	abt turn I	ana and M/P	right turp		
r and ADA im	proveme	ents.	ngni turri		
move existing	y WB driv	ving lane.			
rices and temp	ວorary ຣເ	urfacing to ac	ommodate	e a rig	ht trun
and new mer	ge lane.				
ruct new WB o	driving la	ne.			
ruct fillets, cur	b & gutte	er, ADA impro	ovements	and	
odate Phase	3A traffic				
ontrol Sheet)					

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Phase 3A

- 1. Set up Phase 3A traffic control.
- 2. 220+00 to 228+50 - Install permanent pavement markings.
- 100+21.14 to 103+87.45 Remove existing surfacing to allow construction of the new center lane/ WB left turn lane. 3.
- 100+21.14 to 103+87.45 Construct center lane/ WB left turn lane. 4.

Phase 3B

- Set up Phase 3B traffic control. 1.
- 2.
- 3.
- 103+87.65 to 136+50 Construct the WB driving lane and all remaining work on the 4. North side of US Hwy 18.
- 116+00 to 119+50 Construct the center lane/ WB left turn lane. 5.
- 6.

SES ONLY STATE OF		SHEET	TOTAL SHEETS	
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103+87.45 to 136+50 - Remove existing surfacing, sidewalk, ramps and C & G to construct the WB driving lane and all remaining work on the North side of US Hwy 18. 116+00 to 119+50 - Remove surfacing to construct the center lane/ WB left turn lane.

116+00 to 119+50 - Install temporary surfacing where needed due to utility and storm sewer improvements or as directed by the engineer.



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ose the cente side drive lar	er turn la ne.	ne and move tr	affic to	the n	ew
a point beyo	ond Phas	se 4 surfacing			
& Rt. Constr enne Ave. S	uct cente	er lane surfacir	ig with o	excep	otion
all temporary	, v surfacir	na where needs	مىلە مە	to util	ity
r as directed	bv the e	naineer	su uue	io uii	ity
kisting EB dri rn lane.	ving lane	e and move tra	ffic to n	ew	
nprovements	5.				
, South aide	of LIG LI	MAY 10			
- South Slue	ບບວ⊓∿	WV 10.			

Complete intersection (US 18, SD 407 & Main Street) improvements including surfacing, curb & gutter radi, ADA improvements and traffic siganal installation.

Use the Detour for right turning traffic movements from SD 407 on to US 18

PHASING DETAILS (SD 407)



NOTE: See Temporary Traffic Control Pha Details 215+00 - 228+00 (US 18) & 100+00 - 136+50 (US 18) for addition Phase 2 detail information.

Phase 2

- Remove existing pavement marking a Temporary Traffic Control Plan sheet 1.
- 2. 200+00 Rt. to 214+50.11 Rt. - Consti and private access aprons.
- 3. Install permanent pavement marking

Phase 6 (Phase 1 may be extended to accomodate this work) Set up Phase 6 traffic control. (Mirror Phase 2 (SD 407) traffic control.) 210+00 Lt. to 212+03.39 Lt. - Construct fillets, curb & gutter, ADA improvements and private access aprons.

- 1.
- 2.
- 3. Install permanent pavement markings. (SD 407)

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and Install tra	iffic cont	rol as shown o	on the		
t for Phase 2	(SD 407).			
ruct fillets ou	rh & autt	or ADA impr	ovemente		
ruct miets, cu	in a guil	ei, ADA impi	overnents	>	
s. (SD 407)					





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I RAFFIC FL	OW DIRECTION	N I
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ACTIVITIES EVOLVE. (TYPICAL ALL LOCATIONS)



GENERAL NOTES:

The detailed drawings are for illustrative purpose and dep concrete barrier. If new movable concrete barriers are reaccording to the F shape movable concrete barrier detail

Each movable concrete barrier section weighs 5030 ± po

Each movable concrete barrier section is detailed to prov of a pin through steel loops.

The Jersey shape or any version of the F shape traffic co on a project, however, only the same type or version will

Movable concrete barrier sections will be placed to provid surface as approved by the Engineer.

Movable concrete barrier sections will never be moved or

Movable concrete barrier sections that have been damage considered damaged if the loops are end welded onto exthere is exposed rebar from fractured concrete.

All cost for transporting the barriers from the specified loc returning the barriers to the specified location will be incid "Traffic Control Movable Concrete Barrier".

If the concrete barriers need to be moved and reset on the by truck, all cost for removing, transporting, and resetting price per each for "Remove and Reset Traffic Control Mo in alignment of the barriers, not requiring the barriers to be contract items.

	S D D	TRAFFIC CONTROL
Published Date: 2025	D 0 T	(F SHA

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picts the current version of the F sha	pe				
equested on a project, they will be co	nstructed				
ils on standard plate 628.10.					
ounds.					
vide end "A" to end "B" connection by	y insertion				
ontrol movable concrete barriers may	/ be used				
l be used for each run of barriers.					
ide uniform bearing of the appricance with the powert					
ide uniform bearing of the sections with the paved					
or litted using the end loops.					
ged will not be used. Barrier sections	are				
xisting damaged loops, loops are fractured, or					
cation to the project site, installing, a	nd				
idental to the contract unit price per each for					
,					
he project, requiring the barriers to be	e transported				
g the barriers will be incidental to the	contract unit				
ovable Concrete Barrier". All cost for small shifts					
be transported by truck, will be incidental to various					
	September 14, 2018				
	PLATE NUMBER				
UL MUVABLE CONCRETE BARRIERS	628.0/				
APE INTERIOR SECTION)	Sheet C of C				
-	Sneet 2 of 2				





FOR BIDDING PURPOSES ONL





SectionC/StdPlates dar





otted From - TRCU10208

		STATE OF SOUTH	NH-CR-F	PROJECT EM 0018(195)103	SHEET	TOTAL SHEETS	
12	ES UNL	DAKOTA	P 0407(0	00)01	C35	C39	
		Plotting Date:	09/12	2/2024			
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	TRIAN WALK 8 onal)	- in					
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	~	-	Temp Mark	porary Pavement			
X			Cros	swalk Lines			
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\wedge		\sim	S HERE	9-11a			
2			SIDE WAL	R9			
			\Box				
\sim		5 ^					
<u>s</u>							
	CLOSED R9-9		hannelizir	na Device			
IDE W/	ALK CLOSED AHEAD		ongitudina	al Pedestrian			
CROSS HEDE Barricade							
	R9-11						
	Curb parking	will be prot	hibited for	at least			
	50 feet in adv	ance of mi	dblock cro	osswalk.			
	Pedestrian tra	affic signal	displays o	controlling			
	deactivated.	vaiks shoul	u ne cove				
	Only the treffi	c control de	evices cor	atrolling			
	pedestrian flo	ws are sho	wn. Othe	r devices may			
	be needed to Use lane clos	control trat	tic on the	streets. NARROWS			
	signs as need	led.	, <u> </u>				
	Street lighting	should be	consider	ed.			
	For nighttime	closures 1	Tvpe A fla	shing warning			
	lights may be	used on ba	arricades	supporting			
	signs and clos	sing sidewa	alks.				
<u>></u>	The channelizing devices will be drums or						
•	remain overni	ight.	C CONTROL I	January 22, 2021			
				PLATE NUMBER			
SURES AND PEDESTRIAN DETOURS		634.33					
			Sheet I of I				













	STATE OF PROJECT		SHEET	TOTAL	
SES			NH-CR-EM 0018(195)103		SHEEIS
020	UNL	DARUTA	P 0407(00)01	C39	C39
		Plotting Date:	09/12/2024		