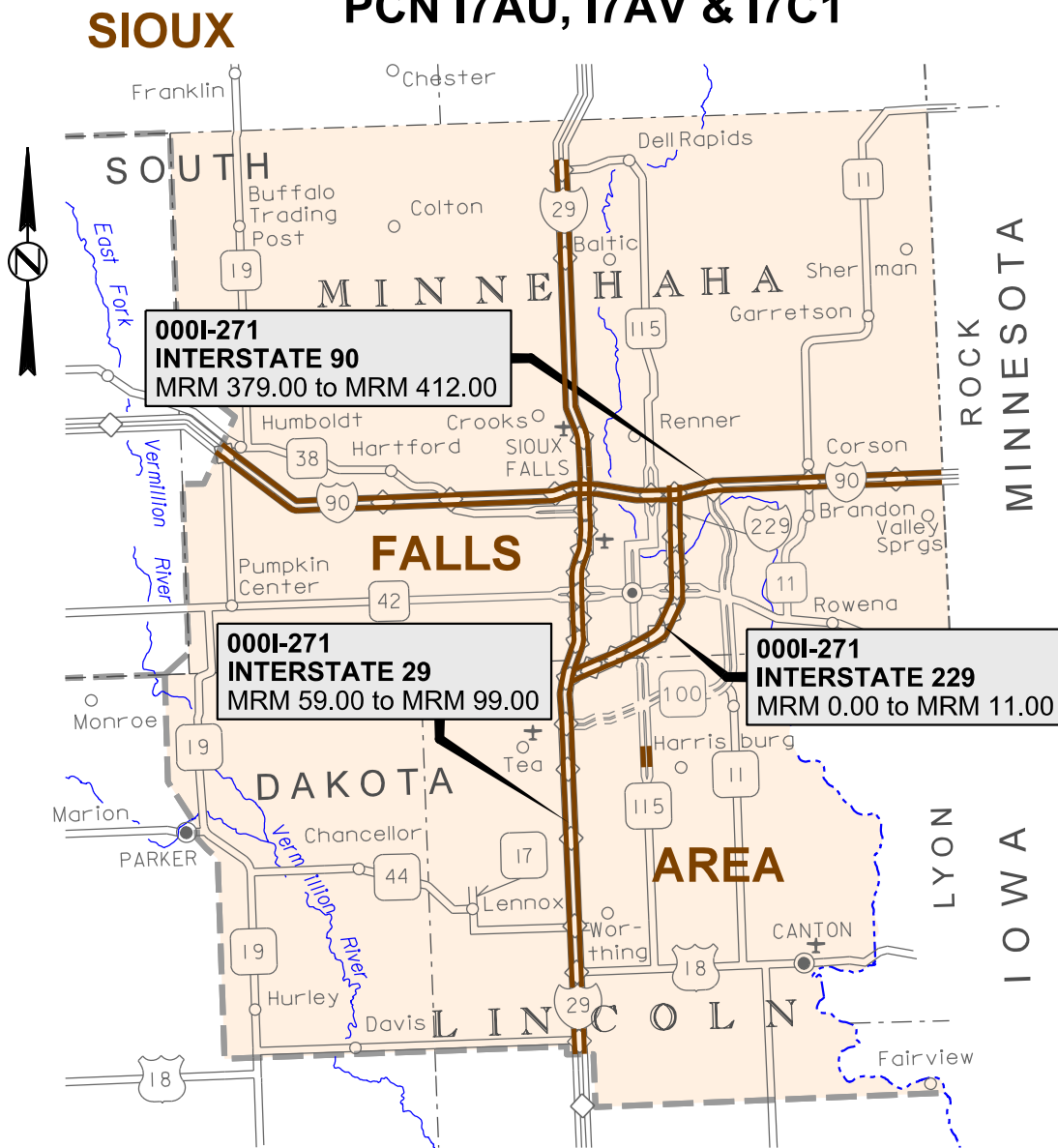


**000I-271  
 INTERSTATES 29, 90 & 229  
 MINNEHAHA & LINCOLN COUNTIES  
 SWEEPING  
 PCN I7AU, I7AV & I7C1**



**STORM WATER PERMIT**  
 (None required)

ROUTE	DESIGN DESIGNATION		
	I29	I90	I229
ADT(2022)	35,380	19,924	35,508
ADT(2042)	56,632	30,612	56,710
DHV	6,266	3,744	6,226
D	100%	100%	100%
T DHV	8.5%	9.0%	4.0%
T ADT	18.7%	19.9%	8.9%
V (RURAL)	80 MPH	80 MPH	-
V (URBAN)	65 MPH	65 MPH	65 MPH

**0001-271  
MINNEHAHA & LINCOLN COUNTIES**

**INDEX OF SHEETS**

Sheet 1	Layout Map
Sheet 2	Index of Sheets & Estimate of Quantities
Sheets 3 - 5	Environmental Commitments
Sheets 6 - 9	Plan Notes
Sheets 10 - 11	Traffic Control Details

**ESTIMATE OF QUANTITIES**

<b>BID ITEM NUMBER</b>	<b>ITEM</b>	<b>QUANTITY</b>	<b>UNIT</b>
910E1210	Truck with Operator, Street Sweeping <i>Year 2024</i>	250	Hour
910E1210	Truck with Operator, Street Sweeping <i>Year 2025</i>	250	Hour
910E1210	Truck with Operator, Street Sweeping <i>Year 2026</i>	250	Hour

0001-271  
MINNEHAHA & LINCOLN COUNTIES

**ENVIRONMENTAL COMMITMENTS**

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified 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. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: <https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf>

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

**COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES**

**COMMITMENT B2: WHOOPING CRANE**

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

**Action Taken/Required:**

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

**COMMITMENT B4: BALD EAGLE**

Bald eagles are known to occur in this area.

**Action Taken/Required:**

If a nest is observed within one mile of the project site, notify the Project Engineer immediately so that he/she can consult with the Environmental Office for an appropriate course of action.

**COMMITMENT C: WATER SOURCE**

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water ( $\geq 140$  °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

The Contractor will not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

0001-271  
MINNEHAHA & LINCOLN COUNTIES

**COMMITMENT C: WATER SOURCE (CONTINUED)**

**Action Taken/Required:**

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:

<<http://sdleastwanted.com/maps/default.aspx>>

South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species:

<<https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04>>

**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 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 Agriculture 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 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 not to exceed the duration of the project. Prior to project completion, the waste will 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.

Cost 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.

0001-271  
MINNEHAHA & LINCOLN COUNTIES

**COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES**

State Historical Preservation Office (SHPO or THPO) concurrence has not been obtained for this project.

**Action Taken/Required:**

All earth disturbing activities 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 in 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 within 100 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

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.

**0001-271  
MINNEHAHA & LINCOLN COUNTIES**

**SPECIFICATIONS**

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

**SCOPE OF WORK**

Contractor will furnish all necessary vehicles, equipment, supervision, labor, material, tools, water, debris disposal and incidentals necessary to complete the work to the satisfaction of the Highway Maintenance Supervisor. Work to be done consists of sweeping on I29, I90 and I229 within the Sioux Falls Area. The locations consist of curbs for bridge approach slabs, bridge deck curb lines, along median barriers, interchange ramps and at adjacent crossroads with curb and gutter, as directed by the Supervisor. The cleaning/sweeping operation will consist of removing all dirt, mud, silt, sand, paper, rocks, cans, glass, dead animal carcasses, tire treads, vehicle parts and other debris. Unforeseen conditions, such as weather, can bring unusual amounts of debris to bridge sites. Removal of all debris regardless of scope and magnitude is the responsibility of Contractor.

The Contractor will expect to perform a cleaning/sweeping as follows during the terms of this contract.

The first cleaning/sweeping will be conducted during the months of October or November of each year as directed by the Highway Maintenance Supervisor at the following locations only:

**I29**

Exit 68 County Road 116 Bridge  
Exit 71 County Road 110 Bridge  
Exit 73 Bridges & Along Concrete Barrier on Mainline and in front of Larry's Truck Stop in NE Quadrant Along County Road 106  
Exit 75 Bridges over I229  
Mainline Under 57th Street Bridge  
Mainline Under 49th Street Bridge  
Mainline Under 41<sup>st</sup> Street Bridge  
Mainline Under 26<sup>th</sup> Street Bridge  
Skunk Creek Bridges North of 26<sup>th</sup> Street  
12<sup>th</sup> Street Bridges  
RR Bridges North of 12<sup>th</sup> Street  
Madison Street Bridges and C&G on Ramps underneath  
Russell Street Bridge & NB On Ramp & Along Concrete Barrier on Mainline  
Benson Road Bridges and C&G underneath  
Mainline under I90 Bridges  
Exit 86 Crooks Bridge  
Exit 94 Baltic Bridge  
Exit 98 Dell Rapids Bridge

**I90**

Exit 379 (Humboldt) Bridges  
Exit 390 (SD38) Bridges  
Skunk Creek Bridges  
468<sup>th</sup> Avenue Bridges  
MRM 392.90 Bridges  
Willow Creek MRM 393.64 Bridges

**I90 (CONTINUED)**

MRM 394.72 Bridges  
Mainline under Exit 395 (Marion Road)  
Exit 396 Bridges over I29  
RR Bridges  
Big Sioux River Bridges  
Silver Creek Bridges  
RR Bridges  
Exit 399 (Cliff Avenue) Bridges  
Exit 400 Bridges over I229  
Mainline under Exit 402 (Eros) Bridge  
RR Bridges just West of Brandon  
Mainline under Exit 406 (Brandon) Bridge  
Split Rock Creek Bridges  
Exit 410 (Valley Springs) Bridge  
MRM 411.47 Bridges  
**I229**  
Mainline under I29  
Mainline under Solberg Avenue Bridge  
Big Sioux River Bridges South of Western Avenue  
Minnesota Avenue Bridges  
Cliff Avenue Bridges  
Mainline under 26<sup>th</sup> Street Bridge  
Big Sioux River Bridges North of 26<sup>th</sup> Street  
RR Bridges South of 10<sup>th</sup> Street  
Both side of Concrete Median Barrier from South of 18th Street to North of 6th Street  
Rice Street Bridges  
Big Sioux River Bridges North of Rice Street

**0001-271  
MINNEHAHA & LINCOLN COUNTIES**

**SCOPE OF WORK CONTINUED)**

Additional sweepings will be conducted every other month or as directed by the Highway Maintenance Supervisor and will include the following:

All Bridges on mainline I29, I90 & I229 in the Sioux Falls City limits.

All Ramps with Curb & Gutter

SD115 from 271<sup>st</sup> Street to 273<sup>rd</sup> Street

I29 Exit 73 (Tea) underneath

I29 MRM 64 RR Bridges

I29 Exit 64 (280<sup>th</sup> Street)

I29 Exit 62 (US18 East) Bridge

I29 MRM 59.8 Bridges

I29 Exit 59 (US18 West) Bridge

**GENERAL REQUIRMENTS**

Contractor will comply with all Federal, State, County and Local regulations, including disposal of debris collected.

The work may be performed during either day time or night time hours except at the locations listed below. No work will occur in these areas during the peak hours defined as 6:30AM-8:30AM and 4:00PM-6:00PM.

- I29: Exit 73 (Tea) to Exit 86 (Renner/Crooks)
- I229: Entire route
- I90: Exit 395 (Marion Road) to Exit 400 (I229)

Equipment and vehicles will not be stored in the highway Right-of-Way.

**CLEANING SCHEDULE**

The Contractor will provide the Highway Maintenance Supervisor a cleaning schedule for the current week, no later than 10:00AM Monday. The Contactor will provide the Supervisor a phone number to be able to contact the onsite Foreman of the crew during working hours. The Highway Maintenance Supervisor (Supervisor) is Keith Voegeli, Mobile: (605) 941-4477, Office: (605) 367-5680.

**TRAFFIC CONTROL**

For a 4 lane divided roadway, traffic control will be as per the traffic control details for **MOBILE SWEEPING OPERATIONS ON A DIVIDED 4-LANE ROADWAY** included in these plans.

Vehicles and equipment working in traffic or alongside traffic will be equipped with a flashing amber light visible from all directions at a minimum distance of 1/2 mile. The amber light will be mounted on the uppermost part of the Contractor's vehicle. Lights must flash at 75 ±15 flashes per minute. The sweeper will have lights, meeting the aforementioned requirements, at the front and back of the equipment. Vehicle flasher/hazard lights are not acceptable.

The Contractor's equipment will be required to enter and leave the project only at interchanges. Crossing of the median will not be allowed.

**0001-271  
MINNEHAHA & LINCOLN COUNTIES**

**SWEEPING REQUIREMENTS**

Sweeping areas will include all curb lines along both sides of the bridge deck and approach slabs, or to the edge of the pavement where no curbs exist, along all curbs on raised medians, and along concrete barriers. Contractor is responsible for sweeping from the marked white or yellow edge line to the edge of bridge deck or approach slab regardless of the width.

Effort beyond a mechanical sweeper may be required to loosen harden and packed material on the surface and along the curb face.

Sweeping will always be accomplished in the same direction as traffic flow.

Contractor will make every reasonable effort to minimize streaks left by sweepers.

At least 2 passes of the sweeper will be made over areas that require sweeping. The total number of passes required will vary based upon the width of sweeping required and the width of the sweeper used.

Sweeping operations will extend at least 50 feet beyond both ends of the approach slab, or end of bridge deck if no approach slab is present. There should be no ridge or pile of material left on the roadway or shoulder surface at the end of the sweeping operations.

**DISPOSAL**

All refuse material and debris collected will become the property of the Contractor and will be properly disposed of. Material may be deposited at the Sioux Falls Area DOT complex located at 5316 W. 60<sup>th</sup> St. North, Sioux Falls, SD 57107

No on-road storage or dumping will be permitted.

**EQUIPMENT**

All equipment will be adequately maintained mechanically, aesthetically, and will be fully operational during all sweeping operations.

All equipment will be properly registered and insured according to motor vehicles laws of the State of South Dakota.

All units will be clearly and prominently marked with Contractor's company name.

- **SWEEPER**

Minimum width of main broom or pickup head will be 54 inches. Sweeper will utilize both left side and right side brooms for picking up debris. Sweeper will have an internal self-contained storage hopper. Storage hopper will be a minimum capacity of 4 Cubic Yards.

- **SWEEPER BRUSH/BROOM REPLACEMENT**

Worn brushes and brooms will be replaced and adjusted to ensure maximum efficiency:

- Six inches on the main broom,
- Six inches on the gutter brushes,
- As required on trash direction brush.

These will be minimum criteria and final determination will be on the effectiveness of all brushes and brooms.

- **ATTENUATOR**

Truck mounted or trailer attenuators may be utilized, provided attenuators conform to and are maintained in accordance with the requirements of Section 634.2 and Part 6 of the MUTCD for Category III traffic control devices.



**0001-271  
MINNEHAHA & LINCOLN COUNTIES**

**DUST CONTROL**

Contractor will use all reasonable methods to minimize dust emissions during the performance of this Contract. Contractor will not create dust in such a quantity to create a nuisance, danger, or impair visibility.

Spraying of water during sweeping operations may be required to control dust.

**PERFORMANCE**

Primary objectives of the cleaning/sweeping program are:

- Remove debris buildup to reduce infiltration of roadway deicers into concrete.
- Prevent debris from enter storm drains and bridge deck drains.
- Prevent debris from entering waterways.
- Maintain gutter flow lines free of debris for free flow of water.
- Maintain a state of cleanliness for safety and acceptable to travelers.

Sweeping will normally consist of a pass (or passes) over an area. Contractor will make as many passes, or such extra effort as may be required to adequately clean the bridge deck and approach slabs. Obstructions such as accumulations of silt, compacted dirt, leaves and similar debris will be removed. Items such as small tree limbs, dead animal carcasses, tire retreads, vehicle parts and rocks may require removal prior to sweeping with a mechanical sweeper.

Inspections will be performed on a regular basis, as well as spot checks and response to complaints.

The Supervisor will decide adequacy of cleaning/sweeping.

If the results of a cleaning/sweeping are considered unsatisfactory by the Department, the Contractor will re-clean/re-sweep unsatisfactory area(s) at Contractor's expense within 10 days after notification.

SDDOT reserves the right to withhold payment for missed, incomplete, or unsatisfactory sweeping performance.

**DEFICIENT PERFORMANCE**

Liquidated Damages will be applied to deficient performance and/or late completion.

Repeated instances of failure to perform will result in cancellation of the Contract.

**RECORD KEEPING**

Contractor will complete records for sweeping services which will be documented on the invoices. Contractor will document arrival time at each bridge site, start and finish time of sweeping operations, number of passes made with sweeper, and departure time from each bridge site. Payment for services will not be made until document is completed and submitted to the Supervisor. Recording keeping will always be kept up to date and records will be made available to the Supervisor at any time.

**BASIS OF MEASUREMENT AND PAYMENT**

Cost for mobilization to and from the site, equipment, material, labor and incidentals to clean/sweep will be incidental to the contract unit price per hour for Truck with Operator, Street Sweeping. Cost for disposal of all refuse material and debris, including dump fees, will be included in the contract unit price per hour for Truck with Operator, Street Sweeping.

Cost for shadow vehicles, traffic control signs, arrow boards, flaggers, impact attenuators, and other safety devices will be incidental to the contract unit price per hour for Truck with Operator, Street Sweeping.

Sweeping may be increased or decreased based on need and available budget.

# MOBILE SWEEPING OPERATIONS ON A DIVIDED 4-LANE ROADWAY

\* In situations where multiple work locations in a limited distance make it practical to place stationary signs, the distance between the advance warning sign and the work should not exceed 5 miles.

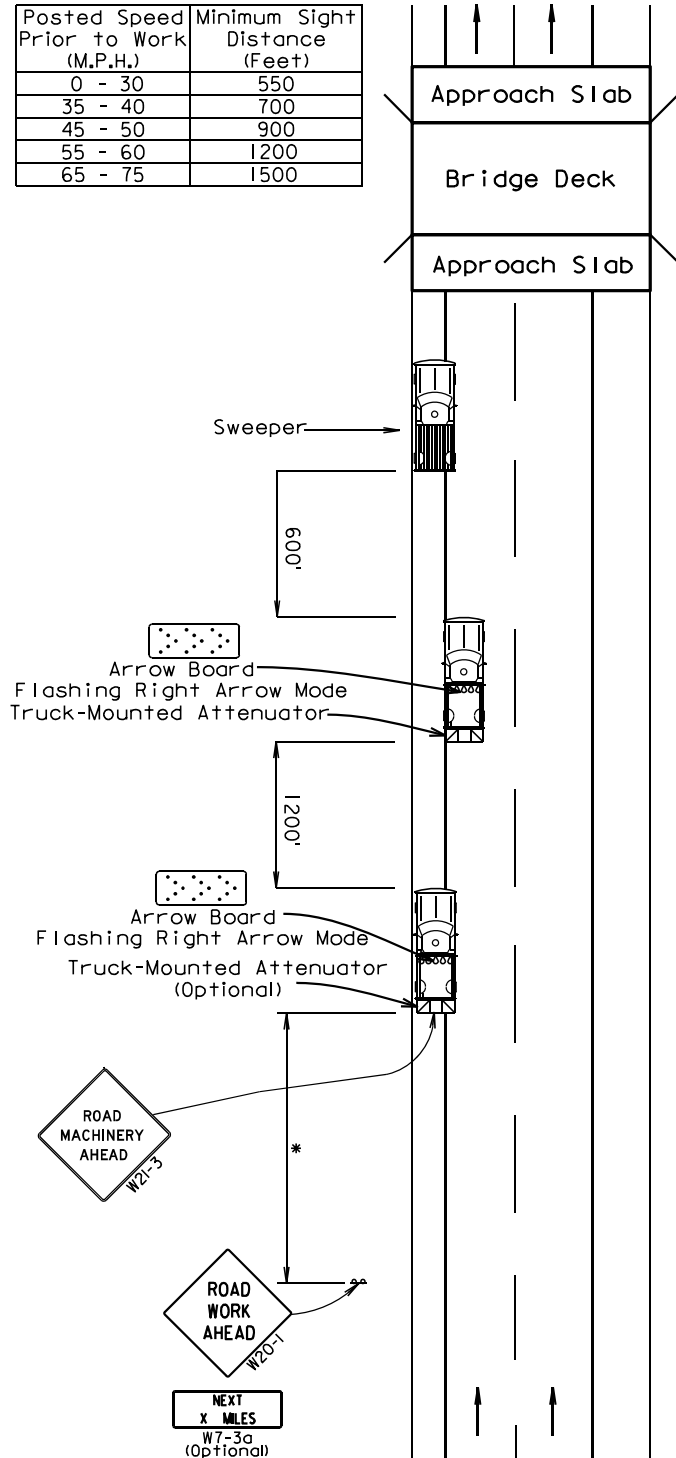
The ROAD WORK NEXT xx MILES sign may be used instead of the ROAD WORK AHEAD sign if the work locations occur over a distance of more than 2 miles.

An activated flashing yellow light shall be used on all vehicles and equipment.

ROAD WORK AHEAD sign is required only when sight distance is restricted. (See Table)

\* Slow Moving Vehicle Emblem displayed on rear of Lead Vehicle when speed is less than 25 M.P.H.

Posted Speed Prior to Work (M.P.H.)	Minimum Sight Distance (Feet)
0 - 30	550
35 - 40	700
45 - 50	900
55 - 60	1200
65 - 75	1500



# MOBILE SWEEPING OPERATIONS ON A DIVIDED 4-LANE ROADWAY

\* In situations where multiple work locations in a limited distance make it practical to place stationary signs, the distance between the advance warning sign and the work should not exceed 5 miles.

The ROAD WORK NEXT xx MILES sign may be used instead of the ROAD WORK AHEAD sign if the work locations occur over a distance of more than 2 miles.

An activated flashing yellow light shall be used on all vehicles and equipment.

ROAD WORK AHEAD sign is required only when sight distance is restricted. (See Table)

\* Slow Moving Vehicle Emblem displayed on rear of Lead Vehicle when speed is less than 25 M.P.H.

Posted Speed Prior to Work (M.P.H.)	Minimum Sight Distance (Feet)
0 - 30	550
35 - 40	700
45 - 50	900
55 - 60	1200
65 - 75	1500

