

Attachment 9

Special Notes – NYSDOT Specific Projects

Liquid Bituminous Materials **(2021 VPP NYSDOT Specific Projects – 2nd Letting)** **(Federal & State Funds)**

IFB# 23232

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SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS

1.1 Introduction

Cold Recycling of bituminous concrete pavements is a corrective maintenance technique. The existing pavement is milled off for a depth of 3 to 4 inches, a liquid bituminous material is added to the millings, and the resulting mixture is placed and compacted on the milled surface. A new bituminous concrete sealing layer is added later. Existing cracks are eliminated, and the resulting pavement should last for many years.

1.2 Pricing Information

1.2.1 General

Price quoted for cold recycling shall be net per square yard completed with contractor's equipment totally by the contractor at the locations indicated herein. The price quoted for cold recycling per square yard shall also include mobilization to the project site and the provision of Work Zone Traffic Control as indicated elsewhere in this Invitation for Bids.

Some projects in this Invitation for Bids include an optional bid item to supply the liquid bituminous material necessary for the cold recycling. **Bidders shall either submit a bid for an emulsion or a PG binder per project, but not both.** The price quoted per gallon for **either** the asphalt emulsion or PG 64S-22 binder (liquid bituminous material) shall include heating, hauling, and applying the liquid bituminous material at the project locations indicated herein. The price quoted per ton for aggregate shall include hauling and applying the necessary aggregate as per the mix design at the project locations indicated herein.

If fog seal is applied, it will be paid under separate item as the total volume of material used for fog seal operations. The price quoted per gallon of fog seal shall include heating, hauling, and applying the liquid bituminous material used for fog sealing operation at the project locations indicated herein.

If Portland cement is used, it will be paid under separate item as the total tons of material used at the location. The price quoted per ton of Portland cement shall include hauling, delivery, and mixing.

1.3 Asphalt Price Adjustments

1.3.1 General

- a. Asphalt price adjustments allowed will be based on the November 2020 average of the F.O.B. terminal price per ton of unmodified PG 64S-22 binder without anti-stripping agent (base average F.O.B. terminal price). The new monthly average terminal price will be determined by the New York State Department of Transportation based on prices of preapproved primary sources of performance graded binder in accordance with the New York State Department of Transportation Standard Specifications.

The November 2020 average is \$461.000.

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

In the event that one or more of the New York State Department of Transportation pre-approved sources discontinue posting a price for asphalt cement, the base average F.O.B. terminal **price shall not be recalculated.**

- b. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the "Adjustment Date", during the contract period. However, asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month following the adjustment date.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

- c. The unit prices of liquid bituminous materials purchased from any award based on this specification will be subject to adjustment based on the following formula:

$$\boxed{\begin{array}{c} \text{Price} \\ \text{Adjustment} \\ \text{(per gallon)} \end{array}} = \boxed{\frac{\begin{array}{c} \text{New Monthly} \\ \text{Average FOB} \\ \text{Terminal Price} \end{array} - \begin{array}{c} \text{Base Average} \\ \text{Terminal} \\ \text{Price} \end{array}}{235}} \times \boxed{\begin{array}{c} \text{Total} \\ \text{Allowable} \\ \text{Petroleum \%} \end{array}}$$

Positive Price Adjustment number shall be added to original per gallon Bid Price.
 Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

New Monthly Average F.O.B. Terminal Price

The average F.O.B. terminal price for unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation per New York State Department of Transportation Standard Specification.

Base Average F.O.B. Terminal Price

The average F.O.B. terminal price of unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation as of November 2020.

Total Allowable Petroleum

The percentage of total allowable petroleum for each item is as follows:

Material Designation	Grade	Asphalt %	Petroleum Allowance %	Total Allowable Petroleum %
702-3201	MS-2	65	8.2	73.2
702-3301	HFMS-2	65	8.2	73.2
702-3401	HFMS-2h	65	2.7	67.7
702-3402	HFMS-2s	65	8.2	73.2
702-3501	SS-1	65	0.2	65.2
702-3601	SS-1h	65	0.2	65.2
702-4201	CMS-2	65	10.2	75.2
702-4301	CMS-2h	65	10.2	75.2
702-4401	CSS-1	65	0.2	65.2
702-4501	CSS-1h	65	0.2	65.2
	PG 64S-22	100	0.2	100.2

Asphalt Price Adjustments will not be allowed for materials which do not have an asphalt cement base.

- d. Work performed after the expiration of the contract, where no extension has been granted, resultant from purchase orders placed prior to expiration of the contract will receive the Asphalt Price Adjustments applicable in effect during the last month of the contract.

Asphalt Price Adjustments for any contracts that are extended will be based on the new average for the month in which the work is done applying the same base established for that contract.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

- e. Asphalt price adjustments allowed by this contract shall be calculated and applied to the original prices. There will not be asphalt price adjustments unless the change amounts to more than \$0.100 per ton/\$0.010 per gallon as applicable from the original price. In these instances, prices will revert to the original prices.
- f. All Asphalt Price Adjustments will be computed to three decimal places.
- g. Should these provisions result in a price structure which becomes unworkable, detrimental or injurious to the State or in prices which are not truly reflective of market conditions or which are deemed by the Commissioner to be unreasonable or excessive, and no adjustment in price is mutually agreeable, the Commissioner reserves the sole right upon ten business days written notice mailed to the Contractor to terminate any contract resulting from this bid opening.
- h. All asphalt price adjustments shall be published by the State and issued to all contract holders whose responsibility will be to attach the appropriate State notification (based on when the work was performed) to the payment invoice submitted to agency.

1.3.2 Asphalt Price Adjustment: Example

This example is for illustration purposes only. Actual Base Average Price, etc., may vary:

Material Designation 702-3301, HFMS-2

Base Avg. Price per Ton = \$461.000

New Avg. Price per Ton = \$471.000

Total % Asphalt Plus Petroleum Allowance = 73.2%

$$\begin{array}{|c|} \hline \text{Price} \\ \text{Adjustment} \\ \text{(per gallon)} \\ \hline \end{array} = \frac{(471.000 - 461.000)}{235} \times \begin{array}{|c|} \hline 0.732 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline \text{Price} \\ \text{Adjustment} \\ \text{(per gallon)} \\ \hline \end{array} = \begin{array}{|c|} \hline +\$0.031 \text{ per} \\ \text{gallon} \\ \hline \end{array}$$

Positive Price Adjustment number shall be added to original per gallon Bid Price.

Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

1.4 Payment

Payment for cold recycling shall be made at the contract price bid for the actual number of completed square yards of cold recycling; the actual number of tons of aggregate; the actual number of gallons of either asphalt emulsion (unmodified or modified) or PG 64S-22 binder at 60 degrees F verified by the receiving agency used in the accepted portions of the work; if used, the actual number of gallons of asphalt emulsion used for fog sealing at 60 degrees F verified by the receiving agency used in the accepted portions of the work; and if used, actual number of tons of Portland cement. The determination as to quantities involved in any contract shall be accepted as final and binding upon the contractor.

A delivery slip stating quantities of liquid bituminous material (unmodified or modified emulsion or PG 64S-22 binder) shall accompany each shipment. An invoice listing the quantities of cold recycling shall be sent promptly by the contractor to the engineer.

No separate payment will be made for the use of water in the mixing process. Any work required for the maintenance and repair of the cold recycling including sweeping by the contractor during the ten-day curing period and for an additional twenty days thereafter shall be done at the contractor's expense.

Payment for work zone traffic control shall be included in the payment for the number of square yards of completed recycling.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

1.5 Pre-Recycling Meeting

The contractor shall schedule a Pre-Recycling Meeting with the affected resident engineer after the acceptance of the mix design by the State and at least one week prior to the start of the recycling. Project-level supervisors for both the owner agency and the contractor shall be present at this meeting. At this meeting the contractor shall present Certificates of Insurance evidencing compliance with the additional insurance requirements set forth in the INSURANCE clause, their proposed recycling schedule, procedure, equipment, mix design, calibration and Work Zone Traffic Control Plan to the State for approval. Prior to the start of recycling, the contractor shall coordinate the details of the recycling with the resident engineer.

1.6 Supervision

The Department of Transportation shall provide supervision for the recycling operation, and pavement marking abrading if applicable. The Resident Engineer shall designate a Project Supervisor who shall be in responsible charge of the operation. All orders pertaining to Work Zone Traffic Control plan from the Project Supervisor to the contractor shall be binding on the contractor. The following portions of Section 105 - CONTROL OF WORK of the Standard Specifications shall apply to these projects: 105-01 ENGINEER'S AUTHORITY, 105-05 VENDOR RESPONSIBILITY, 105-06 COOPERATION WITH UTILITIES AND OTHER CONTRACTORS.

1.7 Work Hours

Work shall not be permitted on Sundays and NYS Holidays. If the contractors desire to work overtime on other days, dispensation from NYS Labor Department must be obtained using Department of Labor Form PW-30 (09/18). Night work is prohibited unless agreed to by the Contractor and NYS Department of Transportation. All Overtime Dispensations requests shall be submitted to the Resident Engineer or his/her designee at the preconstruction meeting.

1.8 Construction Details

The construction details shall comply with the requirements specified herein, including those appearing in the enclosed Attachment 10 - *Detailed Specifications – Liquid Bituminous Materials*. The project supervisor from the State shall have sole responsibility for determining compliance with the specifications. All orders given to the contractor regarding construction details shall be considered final.

1.9 Restoration of Disturbed Areas

During the course of the work the vendor shall take reasonable care not to disturb areas outside the existing pavement. Any areas disturbed by the vendor shall be returned to their original condition at no expense to the State. Any and all debris generated as part of the work shall be removed by the Vendor upon completion of the project.

1.10 Damaged or Deficient Areas

Prior to acceptance and payment by the State for work under this contract, any placed pavement that ravel, delaminates, fails to properly cure, or is in any way defective shall be redone to the satisfaction of the State at the contractor's expense.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

1.11 Possible Mix Design – Cold Recycling

The possible mix design is shown on bid pages and indicates the amount and type of added aggregate and the type and amount of asphalt emulsion, and the amount of PG 64S-22 binder (if the option is provided) to properly recycle the pavement. The contractor shall develop their bids for square yards of cold recycling, aggregate and **either emulsion (unmodified or modified) or PG binder (if the option is provided) for each project** using the indicated possible mix design.

After award, the contractor shall take pavement cores and develop their own mix design and submit it to the agency's representative for approval. This mix design must be submitted a minimum of ten working days prior to the start of work. The bidder shall submit a bid for cold recycling, aggregate, and either asphalt emulsion or PG 64S-22 binder (if the option is provided). **If the bidder's bid does not conform to these requirements, their bid offer will be rejected.**

1.12 Work Zone Traffic Control

The contractor shall be responsible for Work Zone Traffic Control. Traffic shall be controlled in accordance with Manual of Uniform Traffic Control Devices (MUTCD), Section 619-1 through 619-3 of the Standard Specifications as described herein including modifications to the Standard Specifications. The contractor shall submit a Work Zone Traffic Control Plan for approval to the Resident Engineer at the Pre-Work meeting. For two-way roadways, Figures TAST-C1, TAST-C2, TAST-C3OF, TAST-C3TF, TAST-C7 and TAST-CMF included in this document may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way roadways, Figures TAST-CE1, TAST-CE2, and TAST-C8 may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way Freeways or Expressways, Figures TAST-E1, TAST-CE1, TAST-E6, and TAST-E7 may be used as a basis for development of a Work Zone Traffic Control Plan.

All necessary flaggers for Work Zone Traffic Control shall be provided by the Contractor. For two-way roadways, a minimum of three flaggers shall be provided while the work operation is underway. One shall be stationed at each end of the applicable operation and one shall be stationed with the operation. For one-way roadways, a minimum of two flaggers shall be provided while work operation is underway. One shall be stationed at the beginning of the applicable operation and one shall be stationed with the operation. The Contractor shall station flaggers such that communication is maintained between the flaggers. Hand signals, radios, pilot vehicles, or some other means of communication may be used subject to the approval of the Resident Engineer.

All costs of Work Zone Traffic Control as prescribed by this specification including flagging, temporary pavement marking and/or delineation, and construction signs, are to be included in the unit price bid. No separate payment shall be made.

1.12.1 Permanent Construction Signs

The Contractor shall provide construction signs as specified in Section 619-1 through 619-3 of the Standard Specifications and in the MUTCD. At minimum the Contractor shall install the following permanent construction signs: (see next page).

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

SIGN	MINIMUM SIZE	LOCATION
ROAD WORK NEXT _____ MILES	<u>G20-1</u> Conventional 36" x 18" Freeways 48" x 24"	On main line upstream of project in each direction
END ROAD WORK	<u>G20-2</u> Conventional 36" x 18" Freeways 48" x 24"	On main line after end of project in each direction
ROAD WORK AHEAD	<u>W20-1</u> Conventional 36" x 36" Freeways 48" x 48"	On main line in advance of the affected highway segment in each direction and on major intersecting roads 300 -500 feet in advance of main line. Sign should be covered if it conflicts with temporary signing in the vicinity. (Place between the G20-1 and the first warning sign that states condition- i.e. W8-12, W8-9 or W8-15)
DO NOT PASS	<u>R4-1</u> Conventional 24" x 30"	If 2'x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign at or within 100 feet of the beginning of the unmarked area, second within 1,000 feet and subsequent signs, spaced every ½ mile along project in each direction
NO CENTER LINE	<u>W8-12</u> Conventional 36" x 36"	If 2'x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign in advance of the condition and the first "DO NOT PASS" sign: 300' urban is preferred (100' minimum), 500' rural is preferred (200' minimum). Place additional signs spaced every 2 miles on mainline in each direction and after every major intersecting road.
LOW SHOULDER	<u>W8-9</u> Conventional 36" x 36" Freeways 48" x 48"	Place on mainline spaced every 2 miles along project in each direction and after every major intersecting road until shoulder back-up is installed (if conditions warrant use, place between the W8-12 and R4-1, maintaining a minimum of 200' between signs for rural roads and 100' on urban. The W8-12 can be moved upstream to accommodate the required spacing.)
GROOVED PAVEMENT	<u>W8-15</u> Conventional 36" x 36" Freeways 48" x 48"	On any roadway 500 feet in advance of rebates milled under this contract, but not paved. Remove or cover after paving rebate.

**All signs should maintain an absolute minimum spacing of 200' rural or 100' urban. 500' is preferred on rural and 300' is preferred on urban. Double stacking of any of the above signs, or combination thereof, will NOT be permitted.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

Major intersecting roads are defined as through State, County, Town, Village, or City roads. The Contractor may provide Portable signs as shown in Figure 6F-2 of the MUTCD and meeting the requirements of Section 619 of the Standard Specifications for lane closures during work hours. Signs left active at night shall be rigid and reflectorized in accordance with the Standard Specifications.

With prior permission of the State's Resident Engineer, the Vendor may provide portable signs as shown in Figure 6F-2 of the MUTCD for the above referenced DO NOT PASS and NO CENTER LINE signs. The Contractor shall be responsible for assuring that these signs will be in their upright, visible positions twenty-four hours a day, seven days a week while 2' X 4" temporary yellow markings are used instead of full barrier pavement markings.

1.12.2 Temporary Pavement Markings

The Contractor shall install and maintain temporary pavement markings on any paved surface without permanent pavement markings before opening it to traffic, before nightfall or before the end of the work day, whichever comes soonest except for areas that are open during the work shift with channelizing devices or flaggers. Temporary pavement markings shall meet the requirements of Section 619 of the Standard Specifications except that two-lane, two-way highways may be left without full barrier centerlines in no passing zones for a maximum of 7 calendar days provided that NO CENTER LINE (W8-12, black on orange), NO PASSING ZONE (W14-3, black on orange pennant shaped sign), and DO NOT PASS (R4-1) signs are used consistent with the MUTCD and in conjunction with yellow 2 foot by 4 inch temporary markings consisting of retroreflective removable pavement marking tape, paint or yellow temporary overlay markers installed on a 40 ft. cycle to delineate the centerline location.

The State is responsible for the final pavement markings unless otherwise indicated in the contract. If the vendor chooses to install NO CENTER LINE and DO NOT PASS signs and temporary yellow 2 foot by 4 inch pavement markings in lieu of full barrier centerline markings, the signs shall be left in place until the state has completed installing the final pavement markings. The state will normally complete final pavement markings within 7 days of the project completion. However, if unavoidable situations delay the pavement marking installation the signs shall remain in place for 14 calendar days after the project has been completed or until the state has completed installing the final pavement markings, whichever comes first. If permanent pavement marking cannot be installed within 14 days of the project completion, state must install interim pavement marking including center lines, edge lines, stop bars, and simple crosswalks with no hatching before the end of 14 days after project completion.

All costs for Work Zone Traffic Control including flagging, temporary pavement markings, delineation, and construction signs are to be included in the prices bid per ton or square yard as applicable.

1.12.3 Special Note: Work Zone Intrusion Initiative

As part of the Department of Transportation's Work Zone Intrusion Initiative, the following countermeasures shall apply to this Invitation for Bids.

Channelizing Device Spacing Reduction

A maximum channelizing device spacing of 40 ft. shall be provided at work sites where workers are exposed to traffic. This spacing shall be maintained a reasonable distance upstream of workers and shall be used throughout the work zone.

Where tapers are located less than 500 ft. from the work site, the 40-ft. spacing shall be used in the tapers as well.

Drums or vertical panels are preferred for intermediate to long-term stationary work zones, and at any locations where the risk of intrusion is high. Traffic cones are normally adequate for work zones set up and removed on a daily basis.

In long lane or shoulder closures, at least two channelizing devices shall be placed transversely at maximum 800 ft. intervals to discourage traffic from driving through the closed lane. Transversely placed devices are not required where pilot car are in use.

Frequent checks shall be made to reset channelizing devices dislodged by traffic.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

Flagger Station Enhanced Setups

Additional cones and a flag tree meeting Section 6F.62 of the MUTCD shall be used upstream of flagger stations to provide added warning to drivers. These devices shall be used for flagger stations except those that are constantly moving or are in use at one location for no more than a few minutes. If the W20-7a Flagger sign is used, the additional cones and flag tree shall also be used.

For additional details on Flagger Station Enhanced Setups, see Work Zone Traffic Control drawings in this Invitation for Bids.

Temporary Rumble Strips

a. Description

This work shall consist of the installation, maintenance and subsequent removal of temporary rumble strips in paving work zones where indicated in the Invitation for Bids or as directed by the Engineer.

b. Materials

Rumble strips shall be either constructed in place from a raised strip of asphalt concrete or constructed in place with removable pavement marking tape. Raised removable tape rumble strips shall be formed by applying four layers of removable black non-reflectorized removable pavement marking tape. The tape shall be applied to a clean, dry pavement surface in accordance with the manufacturer's recommendations. The pavement surface shall be cleaned with compressed air just prior to application of the tape.

Raised asphalt rumble strips shall be formed from hot mix asphalt meeting the requirements of Items 402.058904 or 402.098904. Tack coat meeting the requirements of Materials Designation 702-XXXXT Asphalt Emulsion Diluted Tack Coat shall be used to adhere the rumble strip to the existing pavement. Temporary rumble strips shall be formed using a specially constructed rumble strip paver (drag box) pulled transversely across the pavement, or by hand placement between forms fixed to the pavement. If forms are used, they shall be removed prior to compaction of the asphalt mixture.

Compaction shall be accomplished using a plate tamper or a static roller. The roadway surface on which the rumble strips are to be attached shall be dry, free of surface contaminants such as dust or oil, and shall be 45°F or greater unless otherwise authorized by the Engineer. The pavement surface shall be cleaned with compressed air just prior to tack coating and subsequent installation of rumble strips.

Temporary rumble strips shall be placed in a succession of three 6-Strip Patterns according to the attached "Suggested Layout Details - Temporary Rumble Strips". Each strip shall be placed on 10 foot centers and traversing the full width of each travel lane. On curbed roadways, rumble strips shall end a minimum of 3 feet from the curb so as to not interfere with drainage. Rumble strips shall be between 6 inches and 9 inches in width and have a final compacted thickness of 0.4 inches + 0.1 inches.

Any raised rumble strips that fail to adhere to the pavement, or become damaged or flattened such that, in the opinion of the Engineer, they are no longer performing their intended function, shall be replaced or repaired by the Contractor to the satisfaction of the Engineer. Any associated damage to the pavement shall also be repaired by the Contractor to the satisfaction of the Engineer. These replacements or repairs shall be made at no additional expense to the Purchasing Agency.

When directed by the Engineer, (e.g., prior to the start of the winter plowing season), or prior to the placement of successive pavement courses, the Contractor shall completely remove the rumble strips from the pavement. Rumble strips shall be removed upon completion of work and concurrently with the removal of other temporary traffic control signs and devices. Any pavement that is damaged in the process of removing the rumble strips shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the Purchasing Agency.

c. Basis of Payment

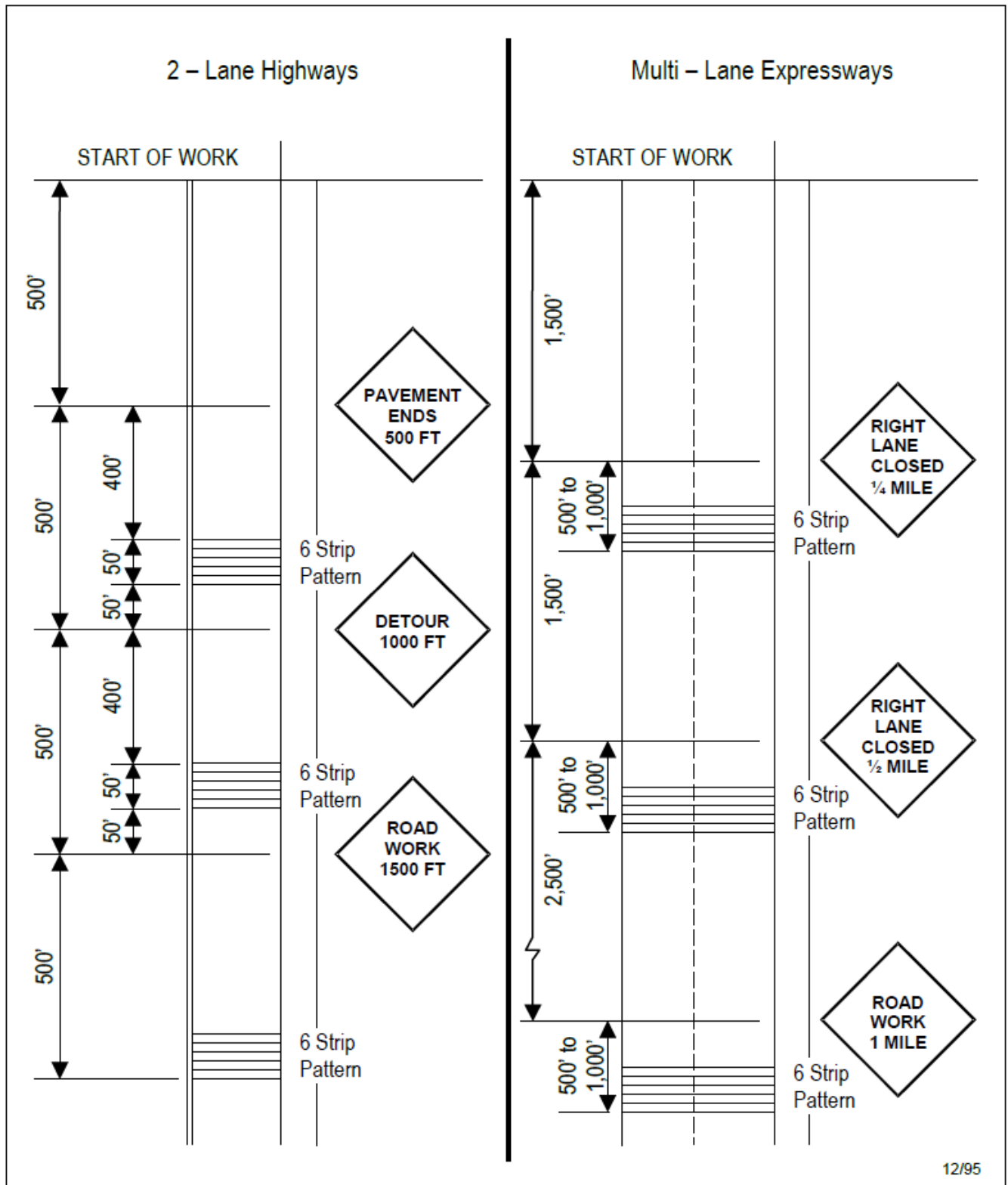
All costs for the installation, maintenance and removal of temporary rumble strips are included in the price per ton or square yard as appropriate. No separate payment shall be made.

d. Suggested Layout Details Drawing-- Temporary Rumble Strips

See the Suggested Layout Details Drawing on the next page.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

Suggested Layout Details -- Temporary Rumble Strips



SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

1.13 Special Notes – Cold Recycling

1.13.1 Funding Source (Cold Recycling)

Projects 360422, 360439, 6V2033, 6V2121, and 6V2124 will be funded by Federal Aid.

1.13.2 Special Note for Coordination with Other Projects (Cold Recycling)

All the projects in this Contract Award Notification involve HMA overlay or chip seal to the cold recycling through separate contract(s). All projects shall require that the cold recycling contractor coordinates their work with the overlay/chip seal contractor(s) to provide required curing period before placing the overlay/chip seal as well as to minimize disruption to the traveling public and the time traffic is running over a recycled surface.

1.13.3 NYSDOT REGION 3 Special Notes (Cold Recycling)

Holiday and Event Restrictions

All Region 3 Projects shall follow the following holiday restrictions:

There shall be no temporary lane closures permitted on the following dates:

6:00 am Friday, May 28, 2021 thru 6:00 am Tuesday, June 1, 2021 - (Memorial Day Holiday)

6:00 am Friday, July 2, 2021 thru 6:00 am Tuesday, July 6, 2021 - (July 4th Holiday)

6:00 am Friday, September 3, 2021 thru 6:00 am Tuesday, September 7, 2021 - (Labor Day Holiday)

6:00 am Wednesday, November 24, 2021 thru 6:00 am Tuesday, November 30, 2021 - (Thanksgiving Holiday)

6:00 am Thursday, December 23, 2020 thru 6:00 am Monday, January 3, 2022 – (Christmas/New Year Holiday)

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

2021 ADDITIONAL TEMPORARY LANE/SHOULDER CLOSURE RESTRICTIONS FOR OTHER HOLIDAYS AND/OR SPECIAL EVENTS

There shall be no temporary lane or shoulder closures on roadway facilities designated below on these additional holidays or special events.

Designated Roadway Facilities		
Facility	Limits	Holiday/Event
I-690	All	Syracuse Nationals
Routes 297, 931B (State Fair Blvd), 695, 5 Bypass	All	
I-81	I-90 (exit 25A) to I-690	
All state roadways	Onondaga County (pavement markings work only)	
Route 481	Oswego County	Oswego Harborfest
Route 104	West Oswego County to I-81	
Routes 104A, 104B, 3	All	
Route 3	North of Route 104B	
Route 48	North of Route 690	
I-81	City of Cortland to City of Syracuse	Lafayette Apple Festival
Route 11	Tully to Syracuse	
Route 11A	All	
Route 20	Route 174 to Madison County Line	
Route 20	Route I81 to Madison County Line	Empire Farm Days
Route 91	Route 20 to Route 173	

Construction activities that will result in temporary lane/shoulder closures on the above- mentioned roadways shall be suspended to minimize travel delays associated with road work on these additional holidays or special events as follows (dates are subject to change):

Holiday or Special Event	Falls on		Temporary lane closures are NOT allowed from
	Days	Date	
Syracuse Nationals	All	07/16/2021 thru 07/19/2021	Beginning 6:00 AM Friday and ending 6:00 AM Monday
Oswego Harborfest	All	07/22/2021 thru 07/26/2021	Beginning 6:00 AM Thursday and ending 6:00 AM Monday
Lafayette Apple Festival	Saturday Sunday	10/9/2021 thru 10/10/2021	Beginning 6:00 AM Saturday and ending 6:00 AM Monday
Empire Farm Days	Monday - Friday	8/2/2021 thru 8/6/2021	Beginning 6:00 AM Monday and ending 6:00 PM Friday

Exceptions can only be made under the following conditions:

- Emergency work.
- Work within long-term stationary lane closures.
- Safety work that does not adversely impact traffic mobility and has been authorized by the Regional Traffic Engineer.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

2021 ADDITIONAL RESTRICTIONS FOR OTHER HOLIDAYS AND/OR SPECIAL EVENTS

There shall be no pavement marking paint work permitted during the Syracuse Nationals Weekend special event on the roadways designated below:

Onondaga County Projects 360425: Route 359 (Syracuse Nationals Weekend).. No pavement marking paint work permitted only. Beginning 6:00 am Friday, July 16, 2021 ending 6:00 am Monday, July 19, 2021.

Pilot Vehicle – Region 3 Projects

Unless otherwise specified, the highway shall be kept open to traffic at all times. Traffic shall be discontinued on the lanes where work is being performed on these projects; and as soon as paving is done and rolled, controlled traffic may be permitted thereon. For Region 3 projects in this Invitation for Bids, the Contractors shall provide sufficient two-way radio equipped pilot vehicles to guide traffic around paving work at a speed not to exceed 15 mph. The pilot vehicles shall be equipped with construction signs meeting the requirements of Section 6F.58 of the Manual of Uniform Traffic Control Devices and a rotating amber beacon:

SIGN	MINIMUM SIZE	LOCATION
PILOT VEHICLE FOLLOW ME	G20-4 CONVENTIONAL 36"x 18"	ON BACK OF PILOT VEHICLES

The pilot vehicle shall have the name of the Contractor prominently displayed.

All cost for Work Zone Traffic Control including flagging, temporary pavement markings, channelizing devices, construction signs, and pilot vehicles shall be included in the prices per ton of bituminous concrete. No separate payment shall be made. **The use of the pilot shall be as ordered by the Resident Engineer.**

1.13.4 NYSDOT REGION 6 Special Notes (Cold Recycling)

Region 6 Specific Special Notes:

To minimize travel delays associated with major holidays, no work shall be permitted during the following periods:

6:00 am Friday, May 28, 2021 thru 6:00 am Tuesday, June 1, 2021 - (Memorial Day Holiday)

6:00 am Friday, July 2, 2021 thru 6:00 am Tuesday, July 6, 2021 - (July 4th Holiday)

6:00 am Friday, September 3, 2021 thru 6:00 am Tuesday, September 7, 2021 - (Labor Day Holiday)

All CIPR projects are at a 3” depth unless otherwise noted in the plans.

The Region requests all Preconstruction paperwork be submitted electronically as .pdf files to Gary.Shepard@dot.ny.gov prior to the Pre-Recycling Meeting, or all documentation be brought to the Pre-Recycling Meeting electronically as .pdf files on a CD or USB “thumb” drive that will not be returned to the contractor.

The expectation of Region 6 is that fog seal shall only be used when environmental conditions (pending rain, cooler temperatures, etc.) could result in a negative impact to the mat (raveling, etc.); Contractors should not plan to fog seal a mat at the close of business daily as part of their normal operations. Region 6 does not anticipate paying for fog seal, so Contractors should plan accordingly.

In lieu of longitudinal cones full project length between open and closed lanes of traffic, the contractor may elect to substitute, when using pilot vehicles, use of cones placed transversely across the closed lane at intervals per section 619-3.02 J.2 (every 800’) and at strategic locations, such as intersections and driveways. All work zone signs will be at a minimum of 5’ tall from the bottom of sign panel.

All Region 6 Cold Recycling projects shall be completed no later than **August 31, 2021**. A schedule reflecting this shall be submitted before start of work to the Region’s ARDO and Gary Shepard, for approval.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

Paint with beads is the only option permitted in Region 6 for temporary and interim pavement markings, unless approved on a case by case basis by the Resident Engineer. Offset the centerline temporary/interim pavement markings so that the permanent markings will cover up the temporary/interim markings, as follows: 8” centerline offset for 2 lane roads, 6” centerline offset for multi-lane roadways.

3 Rollers will be required to be used on all Region 6 cold recycling projects. The same roller cannot be substituted as the “knock-down” and “finish” roller.

All coring shall be coordinated with the Regional Materials Engineer, Dennis Cotton. The mix design submittal for approval shall include all data associated with each core, this shall include but not limited to locations and all laboratory results used to develop the mix design. Additionally, the Regional Materials Engineer may designate companion cores to be taken for QA testing in the regional lab, this shall be done in the presence of the RME or his designee.

Region 6 will waive the requirement to have the nuclear gage inspector on site at the start of the operation for the cold recycling operation. This inspector shall be on site within 4 hours of the start of the operation or as required by the Resident Engineer.

A reminder that per Code Rule 753, a “Dig Safe” ticket shall be submitted for each project notifying of “...the movement or removal...of pavement...”. Some of these utilities may request “no vibratory rolling” for a distance up to 100’ over interstate/intercontinental gas/petroleum transverse crossings. Contractors can visit the following website to view whether there is a likelihood for these utilities in the project limits:

<https://www.npms.phmsa.dot.gov/> and then click the npms public map viewer link and follow the instructions.

All stockpile, spoils, and clean-out sites need to be preapproved by the Regional Maintenance Environmental Coordinator, Ruth Hart, prior to use.

The following bridges are within the project limits and are not to receive the cold recycle treatment:

Project Number	BIN/CIN	Reference Marker
6V2033	BIN 1048020	414-6202-1001
	BIN 1048030	414-6202-1002
6V2121	BIN 1043150	248-6402-1060
	BIN 1043160	248-6402-1074
	BIN 1043170	248-6402-1093
	BIN 1043190	248-6402-1110
	BIN 1043200	248-6402-1117
	BIN 1043210	248-6402-1134
	BIN 1043220	248-6402-1138
	BIN 1043230	248-6402-1148
	BIN 1043240	248-6402-1159
	BIN 1043250	248-6402-3250

Project 6V2121

The CIPR will take place between RM 248-6402-1059 to 1096, 248-6402-1105 to 1118, and 248-6402-1134 to 1192.

SECTION 1: COLD RECYCLING - SPECIFIC PROJECTS (Cont'd)

1.14 Detailed Specifications – Cold Recycling

Please see Attachment 10 – *Detailed Specifications – Liquid Bituminous Materials*.

1.14.1 Project Dimensions - Cold Recycling

Information on pavement widths for projects in this Invitation for Bids is listed for informational purposes only. The dimensions listed in Attachment 12 – Project Dimensions are the best information available, but 100% accuracy is not guaranteed. Bidders should visit the project site to confirm the dimensions given and familiarize themselves with the project particulars before submitting a bid. NYS OGS/NYS DOT assumes no responsibility for erroneous information listed herein.

Please refer to Attachment 12 – Project Dimensions for the Project Dimensions Data.

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS

2.1 Introduction

Heater scarification is a continuous multi-step process in which the existing hot mix asphalt (HMA) pavement surface is recycled using specialized equipment. The HMA pavement surface is heated causing the asphalt to soften. The softened asphalt surface is then immediately scarified and milled to a specified depth. The reclaimed asphalt pavement is then mixed with a recycling agent that rejuvenates the asphalt. The recycled mix is then placed and compacted back onto the roadway. A new bituminous concrete sealing layer is added later. Existing cracks are eliminated, and the resulting pavement should provide a longer life.

2.2 Pricing Information

2.2.1 General

Price quoted for heater scarification shall be net per square yard completed with contractor’s equipment totally by the contractor at the locations indicated herein. The price quoted for heater scarification per square yard shall also include mobilization to the project site and the provision of Work Zone Traffic Control as indicated elsewhere in this Invitation for Bids.

The price quoted per gallon for recycling agent shall include heating, hauling, and applying the recycling agent at the project locations indicated herein.

2.3 Asphalt Price Adjustments

2.3.1 General

- a. Asphalt price adjustments allowed will be based on the November 2020 average of the F.O.B. terminal price per ton of unmodified PG 64S-22 binder without anti-stripping agent (base average F.O.B. terminal price). The new monthly average terminal price will be determined by the New York State Department of Transportation based on prices of preapproved primary sources of performance graded binder in accordance with the New York State Department of Transportation Standard Specifications.

The November 2020 average is \$461.000.

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

In the event that one or more of the New York State Department of Transportation pre-approved sources discontinue posting a price for asphalt cement, the base average F.O.B. terminal **price shall not be recalculated.**

- b. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the “Adjustment Date”, during the contract period. However, asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month following the adjustment date.
- c. The unit prices of liquid bituminous materials (recycling agent) purchased from any award based on this specification will be subject to adjustment based on the following formula:

Price Adjustment (per gallon)	=	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black;">New Monthly Average FOB Terminal Price</td> <td style="width: 5%; text-align: center;">-</td> <td style="width: 45%; border-bottom: 1px solid black;">Base Average Terminal Price</td> </tr> <tr> <td colspan="3" style="border-top: 1px solid black; padding-top: 5px;">235</td> </tr> </table>	New Monthly Average FOB Terminal Price	-	Base Average Terminal Price	235			X	Total Allowable Petroleum %
New Monthly Average FOB Terminal Price	-	Base Average Terminal Price								
235										

Positive Price Adjustment number shall be added to original per gallon Bid Price.
 Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

New Monthly Average F.O.B. Terminal Price

The average F.O.B. terminal price for unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation per New York State Department of Transportation Standard Specification.

Base Average F.O.B. Terminal Price

The average F.O.B. terminal price of unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation as of November 2020.

Total Allowable Petroleum

The percentage of total allowable petroleum for each item is as follows:

Item	Grade	Asphalt %	Petroleum Allowance %	Total Allowable Petroleum %
417.0101	Recycling Agent	65.0	1.0	66.0%

Asphalt Price Adjustments will not be allowed for materials which do not have an asphalt cement base.

- d. Work performed after the expiration of the contract, where no extension has been granted, resultant from purchase orders placed prior to expiration of the contract will receive the Asphalt Price Adjustments applicable in effect during the last month of the contract.
 Asphalt Price Adjustments for any contracts that are extended will be based on the new average for the month in which the work is done applying the same base established for that contract.
- e. Asphalt price adjustments allowed by this contract shall be calculated and applied to the original prices. There will not be asphalt price adjustments unless the change amounts to more than \$0.100 per ton/\$0.010 per gallon as applicable from the original price. In these instances, prices will revert to the original prices.
- f. All Asphalt Price Adjustments will be computed to three decimal places.
- g. Should these provisions result in a price structure which becomes unworkable, detrimental or injurious to the State or in prices which are not truly reflective of market conditions or which are deemed by the Commissioner to be unreasonable or excessive, and no adjustment in price is mutually agreeable, the Commissioner reserves the sole right upon ten business days written notice mailed to the Contractor to terminate any contract resulting from this bid opening.
 All asphalt price adjustments shall be published by the State and issued to all contract holders whose responsibility will be to attach the appropriate State notification (based on when the work was performed) to the payment invoice submitted to agency.

2.3.2 Asphalt Price Adjustment: Example

This example is for illustration purposes only. Actual Base Average Price, etc., may vary:

Item 417.0101
 Base Avg. Price per Ton = \$461.000
 New Avg. Price per Ton = \$471.000
 Total % Asphalt Plus Petroleum Allowance = 73.2%

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

$$\begin{array}{|c|} \hline \text{Price} \\ \text{Adjustment} \\ \text{(per gallon)} \\ \hline \end{array} = \frac{(471.000 - 461.000)}{235} \times \begin{array}{|c|} \hline 0.66 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline \text{Price} \\ \text{Adjustment} \\ \text{(per gallon)} \\ \hline \end{array} = \begin{array}{|c|} \hline +\$0.028 \text{ per} \\ \text{gallon} \\ \hline \end{array}$$

Positive Price Adjustment number shall be added to original per gallon Bid Price.
Negative Price Adjustment number shall be subtracted from original per gallon Bid Price.

2.4 Payment

Payment for heater scarification shall be made at the contract price bid for the actual number of completed square yards of heater scarification; the actual number of gallons of recycling agent at 60 degrees F verified by the receiving agency used in the accepted portions of the work. The determination as to quantities involved in any contract shall be accepted as final and binding upon the contractor.

A delivery slip stating quantities of recycling agent shall accompany each shipment. An invoice listing the quantities of heater scarification and recycling agent shall be sent promptly by the contractor to the engineer.

No separate payment will be made for the use of water in the mixing process. Any work required for the maintenance and repair of the heater scarification including sweeping by the contractor during the ten-day curing period and for an additional twenty days thereafter shall be done at the contractor's expense.

Payment for work zone traffic control shall be included in the payment for the number of square yards of completed heater scarification.

2.5 Pre-Heater Scarification Meeting

The contractor shall schedule a Pre-Heater Scarification Meeting with the affected resident engineer after the acceptance of the mix design by the State and at least one week prior to the start of the heater scarification. Project-level supervisors for both the owner agency and the contractor shall be present at this meeting. At this meeting the contractor shall present Certificates of Insurance evidencing compliance with the additional insurance requirements set forth in the INSURANCE clause, their proposed work schedule, procedure, equipment, mix design, calibration and Work Zone Traffic Control Plan to the State for approval. Prior to the start of heater scarification, the contractor shall coordinate the details of the heater scarification with the resident engineer.

2.6 Supervision

The Department of Transportation shall provide supervision for the heater scarification operation, and pavement marking abrading if applicable. The Resident Engineer shall designate a Project Supervisor who shall be in responsible charge of the operation. All orders pertaining to Work Zone Traffic Control plan from the Project Supervisor to the contractor shall be binding on the contractor. The following portions of Section 105 - CONTROL OF WORK of the Standard Specifications shall apply to these projects: 105-01 ENGINEER'S AUTHORITY, 105-05 VENDOR RESPONSIBILITY, 105-06 COOPERATION WITH UTILITIES AND OTHER CONTRACTORS.

2.7 Work Hours

Work shall not be permitted on Sundays and NYS Holidays. If the contractors desire to work overtime on other days, dispensation from NYS Labor Department must be obtained using Department of Labor Form PW-30 (09/18). Night work is prohibited unless agreed to by the Contractor and NYS Department of Transportation. All Overtime Dispensations requests shall be submitted to the Resident Engineer or his/her designee at the preconstruction meeting.

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

2.8 Construction Details

The construction details shall comply with the requirements specified herein, including those appearing in the enclosed Attachment 10 - *Detailed Specifications – Liquid Bituminous Materials*. The project supervisor from the State shall have sole responsibility for determining compliance with the specifications. All orders given to the contractor regarding construction details shall be considered final.

2.9 Restoration of Disturbed Areas

During the course of the work the vendor shall take reasonable care not to disturb areas outside the existing pavement. Any areas disturbed by the vendor shall be returned to their original condition at no expense to the State. Any and all debris generated as part of the work shall be removed by the Vendor upon completion of the project.

2.10 Damaged or Deficient Areas

Prior to acceptance and payment by the State for work under this contract, any placed pavement that ravel, delaminates, fails to properly cure, or is in any way defective shall be redone to the satisfaction of the State at the contractor's expense.

2.11 Work Zone Traffic Control

The contractor shall be responsible for Work Zone Traffic Control. Traffic shall be controlled in accordance with Manual of Uniform Traffic Control Devices (MUTCD), Section 619-1 through 619-3 of the Standard Specifications as described herein including modifications to the Standard Specifications. The contractor shall submit a Work Zone Traffic Control Plan for approval to the Resident Engineer at the Pre-Work Meeting. For two-way roadways, Figures TAST-C1, TAST-C2, TAST-C3OF, TAST-C3TF, TAST-C7 and TAST-CMF included in this document may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way roadways, Figures TAST-CE1, TAST-CE2, and TAST-C8 may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way Freeways or Expressways, Figures TAST-E1, TAST-CE1, TAST-E6, and TAST-E7 may be used as a basis for development of a Work Zone Traffic Control Plan.

All necessary flaggers for Work Zone Traffic Control shall be provided by the Contractor. For two-way roadways, a minimum of three flaggers shall be provided while the work operation is underway. One shall be stationed at each end of the applicable operation and one shall be stationed with the operation. For one-way roadways, a minimum of two flaggers shall be provided while work operation is underway. One shall be stationed at the beginning of the applicable operation and one shall be stationed with the operation. The Contractor shall station flaggers such that communication is maintained between the flaggers. Hand signals, radios, pilot vehicles, or some other means of communication may be used subject to the approval of the Resident Engineer.

All costs of Work Zone Traffic Control as prescribed by this specification including flagging, temporary pavement marking and/or delineation, and construction signs, are to be included in the unit price bid. No separate payment shall be made.

2.11.1 Permanent Construction Signs

The Contractor shall provide construction signs as specified in Section 619-1 through 619-3 of the Standard Specifications and in the MUTCD. At minimum the Contractor shall install the following permanent construction signs found on the next page.

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

SIGN	MINIMUM SIZE	LOCATION
ROAD WORK NEXT _____ MILES	<u>G20-1</u> Conventional 36" x 18" Freeways 48" x 24"	On main line upstream of project in each direction
END ROAD WORK	<u>G20-2</u> Conventional 36" x 18" Freeways 48" x 24"	On main line after end of project in each direction
ROAD WORK AHEAD	<u>W20-1</u> Conventional 36" x 36" Freeways 48" x 48"	On main line in advance of the affected highway segment in each direction and on major intersecting roads 300 -500 feet in advance of main line. Sign should be covered if it conflicts with temporary signing in the vicinity. (Place between the G20-1 and the first warning sign that states condition- i.e. W8-12, W8-9 or W8-15)
DO NOT PASS	<u>R4-1</u> Conventional 24" x 30"	If 2' x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign at or within 100 feet of the beginning of the unmarked area, second within 1,000 feet and subsequent signs, spaced every ½ mile along project in each direction
NO CENTER LINE	<u>W8-12</u> Conventional 36" x 36"	If 2' x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign in advance of the condition and the first "DO NOT PASS" sign: 300' urban is preferred (100' minimum), 500' rural is preferred (200' minimum). Place additional signs spaced every 2 miles on mainline in each direction and after every major intersecting road.
LOW SHOULDER	<u>W8-9</u> Conventional 36" x 36" Freeways 48" x 48"	Place on mainline spaced every 2 miles along project in each direction and after every major intersecting road until shoulder back-up is installed (if conditions warrant use, place between the W8-12 and R4-1, maintaining a minimum of 200' between signs for rural roads and 100' on urban. The W8-12 can be moved upstream to accommodate the required spacing.)
GROOVED PAVEMENT	<u>W8-15</u> Conventional 36" x 36" Freeways 48" x 48"	On any roadway 500 feet in advance of rebates milled under this contract, but not paved. Remove or cover after paving rebate.

**All signs should maintain an absolute minimum spacing of 200' rural or 100' urban. 500' is preferred on rural and 300' is preferred on urban. Double stacking of any of the above signs, or combination thereof, will NOT be permitted.

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

Major intersecting roads are defined as through State, County, Town, Village, or City roads. The Contractor may provide Portable signs as shown in Figure 6F-2 of the MUTCD and meeting the requirements of Section 619 of the Standard Specifications for lane closures during work hours. Signs left active at night shall be rigid and reflectorized in accordance with the Standard Specifications.

With prior permission of the State's Resident Engineer, the Vendor may provide portable signs as shown in Figure 6F-2 of the MUTCD for the above referenced DO NOT PASS and NO CENTER LINE signs. The Contractor shall be responsible for assuring that these signs will be in their upright, visible positions twenty-four hours a day, seven days a week while 2' X 4" temporary yellow markings are used instead of full barrier pavement markings.

2.11.2 Temporary Pavement Markings

The Contractor shall install and maintain temporary pavement markings on any paved surface without permanent pavement markings before opening it to traffic, before nightfall or before the end of the work day, whichever comes soonest except for areas that are open during the work shift with channelizing devices or flaggers. Temporary pavement markings shall meet the requirements of Section 619 of the Standard Specifications except that two-lane, two-way highways may be left without full barrier centerlines in no passing zones for a maximum of 7 calendar days provided that NO CENTER LINE (W8-12, black on orange), NO PASSING ZONE (W14-3, black on orange pennant shaped sign), and DO NOT PASS (R4-1) signs are used consistent with the MUTCD and in conjunction with yellow 2 foot by 4 inch temporary markings consisting of retroreflective removable pavement marking tape, paint or yellow temporary overlay markers installed on a 40 ft. cycle to delineate the centerline location.

The State is responsible for the final pavement markings unless otherwise indicated in the contract. If the vendor chooses to install NO CENTER LINE and DO NOT PASS signs and temporary yellow 2 foot by 4 inch pavement markings in lieu of full barrier centerline markings, the signs shall be left in place until the state has completed installing the final pavement markings. The state will normally complete final pavement markings within 7 days of the project completion. However, if unavoidable situations delay the pavement marking installation the signs shall remain in place for 14 calendar days after the project has been completed or until the state has completed installing the final pavement markings, whichever comes first. If permanent pavement marking cannot be installed within 14 days of the project completion, state must install interim pavement marking including center lines, edge lines, stop bars, and simple crosswalks with no hatching before the end of 14 days after project completion.

All costs for Work Zone Traffic Control including flagging, temporary pavement markings, delineation, and construction signs are to be included in the prices bid per ton or square yard as applicable.

2.11.3 Special Note: Work Zone Intrusion Initiative

As part of the Department of Transportation's Work Zone Intrusion Initiative, the following countermeasures shall apply to this Invitation for Bids.

Channelizing Device Spacing Reduction

A maximum channelizing device spacing of 40 ft. shall be provided at work sites where workers are exposed to traffic. This spacing shall be maintained a reasonable distance upstream of workers, and shall be used throughout the work zone.

Where tapers are located less than 500 ft. from the work site, the 40-ft. spacing shall be used in the tapers as well.

Drums or vertical panels are preferred for intermediate to long-term stationary work zones, and at any locations where the risk of intrusion is high. Traffic cones are normally adequate for work zones set up and removed on a daily basis.

In long lane or shoulder closures, at least two channelizing devices shall be placed transversely at maximum 800 ft. intervals to discourage traffic from driving through the closed lane. Transversely placed devices are not required where pilot car are in use.

Frequent checks shall be made to reset channelizing devices dislodged by traffic.

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

Flagger Station Enhanced Setups

Additional cones and a flag tree meeting Section 6F.62 of the MUTCD shall be used upstream of flagger stations to provide added warning to drivers. These devices shall be used for flagger stations except those that are constantly moving or are in use at one location for no more than a few minutes. If the W20-7a Flagger sign is used, the additional cones and flag tree shall also be used.

For additional details on Flagger Station Enhanced Setups, see Work Zone Traffic Control drawings in this Invitation for Bids.

Temporary Rumble Strips

a. Description

This work shall consist of the installation, maintenance and subsequent removal of temporary rumble strips in paving work zones where indicated in the Invitation for Bids or as directed by the Engineer.

b. Materials

Rumble strips shall be either constructed in place from a raised strip of asphalt concrete or constructed in place with removable pavement marking tape. Raised removable tape rumble strips shall be formed by applying four layers of removable black non-reflectorized removable pavement marking tape. The tape shall be applied to a clean, dry pavement surface in accordance with the manufacturer's recommendations. The pavement surface shall be cleaned with compressed air just prior to application of the tape.

Raised asphalt rumble strips shall be formed from hot mix asphalt meeting the requirements of Items 402.058904 or 402.098904. Tack coat meeting the requirements of Materials Designation 702-XXXXT Asphalt Emulsion Diluted Tack Coat shall be used to adhere the rumble strip to the existing pavement. Temporary rumble strips shall be formed using a specially constructed rumble strip paver (drag box) pulled transversely across the pavement, or by hand placement between forms fixed to the pavement. If forms are used, they shall be removed prior to compaction of the asphalt mixture. Compaction shall be accomplished using a plate tamper or a static roller. The roadway surface on which the rumble strips are to be attached shall be dry, free of surface contaminants such as dust or oil, and shall be 45°F or greater unless otherwise authorized by the Engineer. The pavement surface shall be cleaned with compressed air just prior to tack coating and subsequent installation of rumble strips.

Temporary rumble strips shall be placed in a succession of three 6-Strip Patterns according to the attached "Suggested Layout Details - Temporary Rumble Strips". Each strip shall be placed on 10 foot centers and traversing the full width of each travel lane. On curbed roadways, rumble strips shall end a minimum of 3 feet from the curb so as to not interfere with drainage. Rumble strips shall be between 6 inches and 9 inches in width and have a final compacted thickness of 0.4 inches ± 0.1 inches.

Any raised rumble strips that fail to adhere to the pavement, or become damaged or flattened such that, in the opinion of the Engineer, they are no longer performing their intended function, shall be replaced or repaired by the Contractor to the satisfaction of the Engineer. Any associated damage to the pavement shall also be repaired by the Contractor to the satisfaction of the Engineer. These replacements or repairs shall be made at no additional expense to the Purchasing Agency.

When directed by the Engineer, (e.g., prior to the start of the winter plowing season), or prior to the placement of successive pavement courses, the Contractor shall completely remove the rumble strips from the pavement. Rumble strips shall be removed upon completion of work and concurrently with the removal of other temporary traffic control signs and devices. Any pavement that is damaged in the process of removing the rumble strips shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the Purchasing Agency.

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

c. Basis of Payment

All costs for the installation, maintenance and removal of temporary rumble strips are included in the price per ton or square yard as appropriate. No separate payment shall be made.

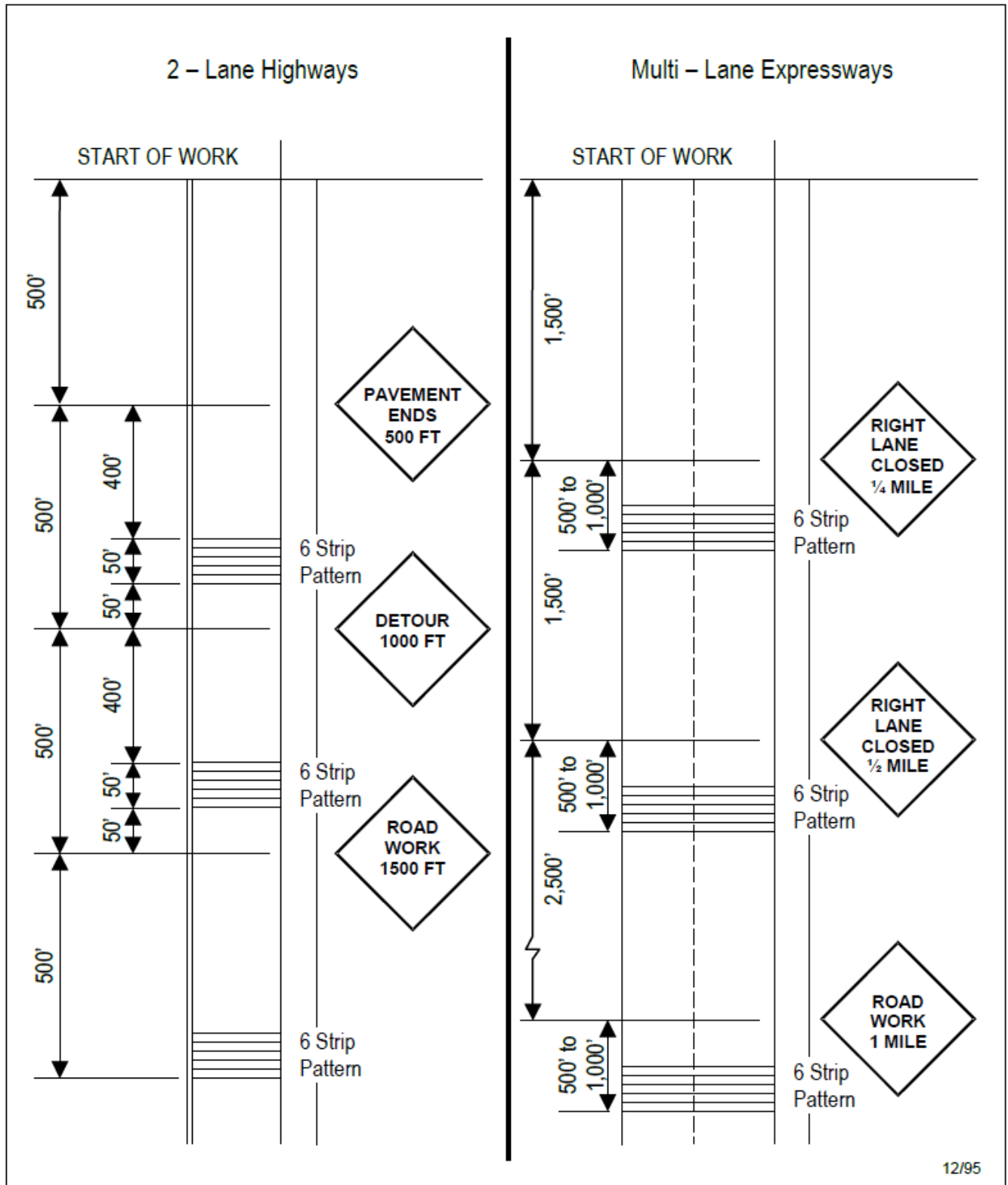
d. Suggested Layout Details Drawing-- Temporary Rumble Strips

See the Suggested Layout Details Drawing on the **next page**.

(Continued on next page.)

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

Suggested Layout Details -- Temporary Rumble Strips



SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

2.12 Special Notes – Heater Scarification

2.12.1 Funding Source (Heater Scarification)

Projects 360430, 6V2123A, and 6V2231 will be funded by Federal Aid.
 Projects, 360420, 360423, 360425, and 360429 are 100% State funded.

2.12.2 Special Note for Coordination with Other Projects (Heater Scarification)

All the projects in this Contract Award Notification involve HMA overlay or paver placed surface treatment to the heater scarification through separate contract(s). All projects shall require that the heater scarification contractor coordinates their work with the top course contractor(s) to provide required curing period before placing the next course as well as to minimize disruption to the traveling public and the time traffic is running over a recycled surface.

2.12.3 Special Note for Pilot Vehicle (Heater Scarification)

Unless otherwise specified, the highway shall be kept open to traffic at all times. Traffic shall be discontinued on the lanes where work is being performed on these projects; and as soon as heater scarification is done and rolled, controlled traffic may be permitted thereon. The Contractors shall provide sufficient two-way radio equipped pilot vehicles to guide traffic around heater scarification work at a speed not to exceed 15 mph. The pilot vehicles shall be equipped with construction signs meeting the requirements of Section 6F.58 and 6C.13 of the Manual of Uniform Traffic Control Devices and a rotating amber beacon. The delineation of the closed lane (cone placement) as required by Section 619-3.02J of the Standard Specifications shall be evaluated by the Resident Engineer based on the traffic control plan presented by the Contractor and, after consultation with the Regional Traffic Safety & Mobility Office, a determination will be made as to what will be required on the project. Daytime lane closures may be used in lieu of pilot vehicles on controlled access highways as deemed appropriate by the Resident Engineer at the time of Pre-Heater Scarification Meeting.

SIGN	MINIMUM SIZE	LOCATION
PILOT VEHICLE FOLLOW ME	G20-4 CONVENTIONAL 36"x18"	ON BACK OF PILOT VEHICLES

The pilot vehicle shall have the name of the Contractor prominently displayed.

All cost for Work Zone Traffic Control including flagging, temporary pavement markings, channelizing devices, construction signs, and pilot vehicles shall be included in the prices per square yard for heater scarification. No separate payment shall be made. **The use of the pilot shall be as ordered by the Resident Engineer.**

2.12.4 NYSDOT REGION 3 Special Notes (Heater Scarification)

Holiday and Event Restrictions

All Region 3 Projects shall follow the following holiday restrictions:

There shall be no temporary lane closures permitted on the following dates:

6:00 am Friday, May 28, 2021 thru 6:00 am Tuesday, June 1, 2021 - (Memorial Day Holiday)

6:00 am Friday, July 2, 2021 thru 6:00 am Tuesday, July 6, 2021 - (July 4th Holiday)

6:00 am Friday, September 3, 2021 thru 6:00 am Tuesday, September 7, 2021 - (Labor Day Holiday)

6:00 am Wednesday, November 24, 2021 thru 6:00 am Tuesday, November 30, 2021 - (Thanksgiving Holiday)

6:00 am Thursday, December 23, 2020 thru 6:00 am Monday, January 3, 2022 – (Christmas/New Year Holiday)

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

2021 ADDITIONAL TEMPORARY LANE/SHOULDER CLOSURE RESTRICTIONS FOR OTHER HOLIDAYS AND/OR SPECIAL EVENTS

There shall be no temporary lane or shoulder closures on roadway facilities designated below on these additional holidays or special events.

Designated Roadway Facilities		
Facility	Limits	Holiday/Event
I-690	All	Syracuse Nationals
Routes 297, 931B (State Fair Blvd), 695, 5 Bypass	All	
I-81	I-90 (exit 25A) to I-690	
All state roadways	Onondaga County (pavement markings work only)	
Route 481	Oswego County	Oswego Harborfest
Route 104	West Oswego County to I-81	
Routes 104A, 104B, 3	All	
Route 3	North of Route 104B	
Route 48	North of Route 690	
I-81	City of Cortland to City of Syracuse	Lafayette Apple Festival
Route 11	Tully to Syracuse	
Route 11A	All	
Route 20	Route 174 to Madison County Line	
Route 20	Route I81 to Madison County Line	Empire Farm Days
Route 91	Route 20 to Route 173	

Construction activities that will result in temporary lane/shoulder closures on the above- mentioned roadways shall be suspended to minimize travel delays associated with road work on these additional holidays or special events as follows (dates are subject to change):

Holiday or Special Event	Falls on		Temporary lane closures are NOT allowed from
	Days	Date	
Syracuse Nationals	All	07/16/2021 thru 07/19/2021	Beginning 6:00 AM Friday and ending 6:00 AM Monday
Oswego Harborfest	All	07/22/2021 thru 07/26/2021	Beginning 6:00 AM Thursday and ending 6:00 AM Monday
Lafayette Apple Festival	Saturday Sunday	10/9/2021 thru 10/10/2021	Beginning 6:00 AM Saturday and ending 6:00 AM Monday
Empire Farm Days	Monday - Friday	8/2/2021 thru 8/6/2021	Beginning 6:00 AM Monday and ending 6:00 PM Friday

Exceptions can only be made under the following conditions:

- Emergency work.
- Work within long-term stationary lane closures.
- Safety work that does not adversely impact traffic mobility and has been authorized by the Regional Traffic Engineer.

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

2021 ADDITIONAL RESTRICTIONS FOR OTHER HOLIDAYS AND/OR SPECIAL EVENTS

There shall be no pavement marking paint work permitted during the Syracuse Nationals Weekend special event on the roadways designated below:

Onondaga County Projects 360425: Route 359 (Syracuse Nationals Weekend).. No pavement marking paint work permitted only. Beginning 6:00 am Friday, July 16, 2021 ending 6:00 am Monday, July 19, 2021.

Project 360430 – Route 414, 96A Seneca County

This project will be paved after heater scarification. The heater scarification contractor is responsible to coordinate their work schedule with the State's paving contractor.

The project also includes production cold milling to be performed by the paving contractor or their designated sub-contractor within the project limits. The paving contractor will production mill the pavement on Rte 414 in the Village of Lodi from RM 414-3504-1057 to RM 414/96A-3501-1053 and in the Village of Ovid from RM 414/96A 3501-1089 to 414/96A-3501-1097. The heater scarification contractor is responsible to coordinate their work schedule with the selected production cold milling contractor.

2.12.5 NYSDOT REGION 6 Special Notes (Heater Scarification)

Region 6 Specific Special Notes:

To minimize travel delays associated with major holidays, no work shall be permitted during the following periods:

6:00 am Friday, May 28, 2021 thru 6:00 am Tuesday, June 1, 2021 - (Memorial Day Holiday)

6:00 am Friday, July 2, 2021 thru 6:00 am Tuesday, July 6, 2021 - (July 4th Holiday)

6:00 am Friday, September 3, 2021 thru 6:00 am Tuesday, September 7, 2021 - (Labor Day Holiday)

For these projects, heater scarification will be performed on the travel lanes and 1 foot over the white edge line. Shoulders will not be heater scarified.

The Region requests all Preconstruction paperwork be submitted electronically as .pdf files to Gary.Shepard@dot.ny.gov prior to the Pre-Heater Scarification Meeting, or all documentation be brought to the Pre-Heater Scarification Meeting electronically as .pdf files on a CD or USB "thumb" drive that will not be returned to the contractor.

In lieu of longitudinal cones full project length between open and closed lanes of traffic, the contractor may elect to substitute, when using pilot vehicles, use of cones placed transversely across the closed lane at intervals per section 619-3.02 J.2 (every 800') and at strategic locations, such as intersections and driveways. All work zone signs will be at a minimum of 5' tall from the bottom of sign panel.

All Region 6 Heater Scarify projects shall be completed no later than August 1, 2021. A schedule reflecting this shall be submitted before start of work to the Region's ARDO and Gary Shepard, for approval.

Region 6 desires a greater placement of Temporary Striping delineation than is required under Section 619 of the NYSDOT Standard Specifications. As outlined below, the following additional quantity/ placement will be required. There are no revisions to the time of placement from the specifications.

Divided Highway Paving Projects:

Temporary Pavement Markings per 619-3.06. A with the following Additions:

- Ticks defining travel lanes changed to 4' long instead of 2' long
- Placement of channelizing devices per section 619-3.02.J.3 along edge of pavement for the duration commencing at beginning of milling and/ or paving operations and left in place until full permanent pavement markings are in place.

SECTION 2: HEATER SCARIFICATION - SPECIFIC PROJECTS (Cont'd)

Paint with beads is the only option permitted in Region 6 for temporary and interim pavement markings, unless approved on a case by case basis by the Resident Engineer. Offset the centerline temporary/interim pavement markings so that the permanent markings will cover up the temporary/interim markings, as follows: 8” centerline offset for 2 lane roads, 6” centerline offset for multi-lane roadways.

All stockpile, spoils, and clean-out sites need to be preapproved by the Regional Maintenance Environmental Coordinator, Ruth Hart, prior to use.

Project Specific Special Notes:

6V2123A -The curb section between RM 36-6401-3041 to 3047 skipped. This section will be milled by residency forces.

6V2231- The truck ramp will be scarified. The quantities are reflected in the estimated materials.

2.13 Detailed Specifications – Heater Scarification

Please see Attachment 10 – *Detailed Specifications – Liquid Bituminous Materials*.

2.13.1 Project Dimensions – Heater Scarification

Information on pavement widths for projects in this Invitation for Bids is listed for informational purposes only. The dimensions listed in Attachment 12 – Project Dimensions are the best information available, but 100% accuracy is not guaranteed. Bidders should visit the project site to confirm the dimensions given and familiarize themselves with the project particulars before submitting a bid. NYS OGS/NYS DOT assumes no responsibility for erroneous information listed herein.

Please refer to Attachment 12 – Project Dimensions for the Project Dimensions Data.

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS

3.1 Introduction

Paver Placed Surface Treatment (Conventional or Modified) is a preventive maintenance treatment used to preserve highway pavements. The treatment is a surface paving system, placed by a self-priming paver, where a modified emulsion tack coat is placed directly before the application of a conventional or rubber modified hot mix asphalt wearing course.

3.2 Pricing Information

3.2.1 General

Price quoted for Paver Placed Surface Treatment shall be net per ton, furnished, heated, delivered, and applied with contractor’s equipment totally by the contractor at locations indicated herein. The price bid per ton for the Paver Placed Surface Treatment shall also include abrading the existing pavement markings and the provision of Work Zone Traffic Control as indicated elsewhere in this Invitation for Bids.

The Contractor is to furnish all necessary labor and equipment to complete the indicated projects except that the State will supervise and control the operations. Permanent pavement marking will be the responsibility of the State upon completion of the project as indicated herein. The equipment supplied to place the material(s) shall appear on the Department’s approved list. All necessary operators shall be supplied along with the appropriate equipment.

3.3 Asphalt Price Adjustments

3.3.1 General

- a. Asphalt price adjustments allowed will be based on the November 2020 average of the F.O.B. terminal price per ton of unmodified PG 64S-22 binder without anti-stripping agent (base average F.O.B. terminal price). The new monthly average terminal price will be determined by the New York State Department of Transportation based on prices of preapproved primary sources of performance graded binder in accordance with the New York State Department of Transportation Standard Specifications.

The November 2020 average is \$461.000.

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

In the event that one or more of the New York State Department of Transportation pre-approved sources discontinue posting a price for asphalt cement, the base average F.O.B. terminal **price shall not be recalculated.**

- b. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the “Adjustment Date”, during the contract period. However, asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month following the adjustment date.
- c. The unit prices of liquid bituminous materials purchased from any award based on this specification will be subject to adjustment based on the following formula:

Price Adjustment (Per Ton)	=	$\left(\begin{array}{c} \text{New Monthly} \\ \text{Average F.O.B.} \\ \text{Terminal Price} \end{array} - \begin{array}{c} \text{Base Average} \\ \text{F.O.B.} \\ \text{Terminal Price} \end{array} \right) \times$	Total Allowable Petroleum %
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Positive Price Adjustment number shall be added to original per ton Bid Price.
 Negative Price Adjustment number shall be subtracted from original per ton Bid Price.

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

New Monthly Average F.O.B. Terminal Price

The average F.O.B. terminal price for unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation per New York State Department of Transportation Standard Specification.

Base Average F.O.B. Terminal Price

The average F.O.B. terminal price of unmodified PG 64S-22 binder without anti-stripping agent is as determined by the New York State Department of Transportation as of November 2020.

The percentage of total allowable petroleum for each item is as follows:

Item #	Material Designation	Asphalt %	Petroleum Allowance %	Total Allowable Petroleum
415.0X0F0218	Paver Placed Surface Treatment – Conventional	6.5	1.0	7.5
415.1X0F0218	Paver Placed Surface Treatment – Modified	6.5	1.0	7.5

Asphalt Price Adjustments will not be allowed for materials which do not have an asphalt cement base.

- d. Work performed after the expiration of the contract, where no extension has been granted, resultant from purchase orders placed prior to expiration of the contract will receive the Asphalt Price Adjustments applicable in effect during the last month of the contract.
 Asphalt Price Adjustments for any contracts that are extended will be based on the new average for the month in which the work is done applying the same base established for that contract.
- e. Asphalt price adjustments allowed by this contract shall be calculated and applied to the original prices. There will not be asphalt price adjustments unless the change amounts to more than \$0.100 per ton/\$0.010 per gallon as applicable from the original price. In these instances, prices will revert to the original prices.
- f. All Asphalt Price Adjustments will be computed to three decimal places.
- g. Should these provisions result in a price structure which becomes unworkable, detrimental or injurious to the State or in prices which are not truly reflective of market conditions or which are deemed by the Commissioner to be unreasonable or excessive, and no adjustment in price is mutually agreeable, the Commissioner reserves the sole right upon ten business days written notice mailed to the Contractor to terminate any contract resulting from this bid opening.
- h. All asphalt price adjustments shall be published by the State and issued to all contract holders whose responsibility will be to attach the appropriate State notification (based on when the work was performed) to the payment invoice submitted to agency.

3.3.2 Asphalt Price Adjustment: Example

This example is for illustration purposes only. Actual Base Average Price, etc., may vary:

Item 18403.12020218
 Base Average Price = \$461.000
 New Average Price = \$471.000
 % Total Allowable Petroleum = 7.5%

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

$$\begin{array}{l} \boxed{\begin{array}{c} \text{Price} \\ \text{Adjustment} \\ \text{(per ton)} \end{array}} = \boxed{(471.000 - 461.000)} \times \boxed{0.075} \\ \\ \boxed{\begin{array}{c} \text{Price} \\ \text{Adjustment} \\ \text{(per ton)} \end{array}} = \boxed{+\$0.750 \text{ per ton}} \end{array}$$

Positive Price Adjustment number shall be added to original per ton Bid Price.
Negative Price Adjustment number shall be subtracted from original per ton Bid Price.

3.4 Payment

Payment for Paver Placed Surface Treatment shall be made at contract prices per ton for the actual quantity of tons placed by the Contractor. Payment for work zone traffic control and abrading the existing pavement markings shall be included in the payment per ton for the Paver Placed Surface Treatment.

A delivery slip stating quantities of hot mix asphalt concrete for paver placed surface treatment shall accompany each shipment. An invoice listing the quantities of paver placed surface treatment in place shall be sent promptly by the contractor to the address indicated on the purchase order.

3.5 Pre- Paver Placed Surface Treatment Meeting

The Contractor shall schedule a Pre-Paver Placed Surface Treatment Meeting with the affected Resident Engineer within one month after award of the Contract and at least two weeks prior to the start of the Paver Placed Surface Treatment. Project level supervisors for both the state and the contractor shall be present at this meeting.

At this meeting the contractor shall present their proposed Paver Placed Surface Treatment schedule, equipment, pavement marking abrading plan, Paver Placed Surface Treatment procedure, and Work Zone Traffic Control plan to the State for approval. At least one week prior to the start of the Paver Placed Surface Treatment, the contractor shall coordinate the details of the project with the Resident Engineer.

3.6 Supervision

The Department of Transportation shall provide supervision for the paver placed surface treatment operation, and pavement marking abrading if applicable. The Resident Engineer shall designate a Project Supervisor who shall be in responsible charge of the operation. All orders pertaining to Work Zone Traffic Control plan from the Project Supervisor to the contractor shall be binding on the contractor. The following portions of Section 105 - CONTROL OF WORK of the Standard Specifications shall apply to these projects: 105-01 ENGINEER'S AUTHORITY, 105-05 VENDOR RESPONSIBILITY, 105-06 COOPERATION WITH UTILITIES AND OTHER CONTRACTORS.

3.7 Work Hours

Work shall not be permitted on Sundays and NYS Holidays. If the contractors desire to work overtime on other days, dispensation from NYS Labor Department must be obtained using Department of Labor Form PW-30 (09/18). Night work is prohibited unless agreed to by the Contractor and NYS Department of Transportation. All Overtime Dispensations requests shall be submitted to the Resident Engineer or his/her designee at the preconstruction meeting.

3.8 Construction Details

The construction details shall comply with the requirements specified herein, including those appearing in the enclosed Attachment 10 - *Detailed Specifications – Liquid Bituminous Materials*. The project supervisor from the State shall have sole responsibility for determining compliance with the specifications. All orders given to the contractor regarding construction details shall be considered final.

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

3.9 Special Note for Paver Placed Surface Treatment

The Contractor will not be responsible for the initial conditioning of the existing pavement and shoulder surfaces as described in Section 402-3.05 of the NYSDOT Standard Specifications. Patching, joint repair, crack filling will be done by NYSDOT forces prior to the paver placed surface treatment project.

However, once work on the project begins, the Contractor is responsible for keeping the pavement and shoulders clean until the paving operations are completed, as per Section 633-3.01 of the NYSDOT Standard Specifications.

3.10 Restoration of Disturbed Areas

During the course of the work the vendor shall take reasonable care not to disturb areas outside the existing pavement. Any areas disturbed by the vendor shall be returned to their original condition at no expense to the State. Any and all debris generated as part of the work shall be removed by the Vendor upon completion of the project.

3.11 Damaged or Deficient Areas

Prior to acceptance and payment by the State for work under this contract, any placed pavement that ravel, delaminates, fails to properly cure, or is in any way defective shall be redone to the satisfaction of the State at the contractor's expense.

3.12 Paver Placed Surface Treatment Overlay Splices

The contractor shall construct Paver Placed Surface Treatment Overlay Splices (commonly known as rebates) as per the enclosed detail Paver Placed Surface Treatment Overlay Splices (see below). The locations of the Overlay Splices shall be as specified in the Table of Paver Placed Surface Treatment Overlay Splices (**Attachment 12: Rebates worksheet**). All costs to construct the Paver Placed Surface Treatment Overlay Splices, including the costs for cutting the existing pavement, milling the Overlay Splices, cleaning the pavement in the Overlay Splice area, and Controlling Traffic, shall be included in the price bid per ton for the Paver Placed Surface Treatment. No separate payment shall be made.

3.13 Work Zone Traffic Control

The contractor shall be responsible for Work Zone Traffic Control. Traffic shall be controlled in accordance with Manual of Uniform Traffic Control Devices (MUTCD), Section 619-1 through 619-3 of the Standard Specifications as described herein including modifications to the Standard Specifications. The contractor shall submit a Work Zone Traffic Control Plan for approval to the Resident Engineer at the Pre-Work Meeting. For two-way roadways, Figures TAST-C1, TAST-C2, TAST-C3OF, TAST-C3TF, TAST-C7 and TAST-CMF included in this document may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way roadways, Figures TAST-CE1, TAST-CE2, and TAST-C8 may be used as a basis for development of a Work Zone Traffic Control Plan. For one-way Freeways or Expressways, Figures TAST-E1, TAST-CE1, TAST-E6, and TAST-E7 may be used as a basis for development of a Work Zone Traffic Control Plan.

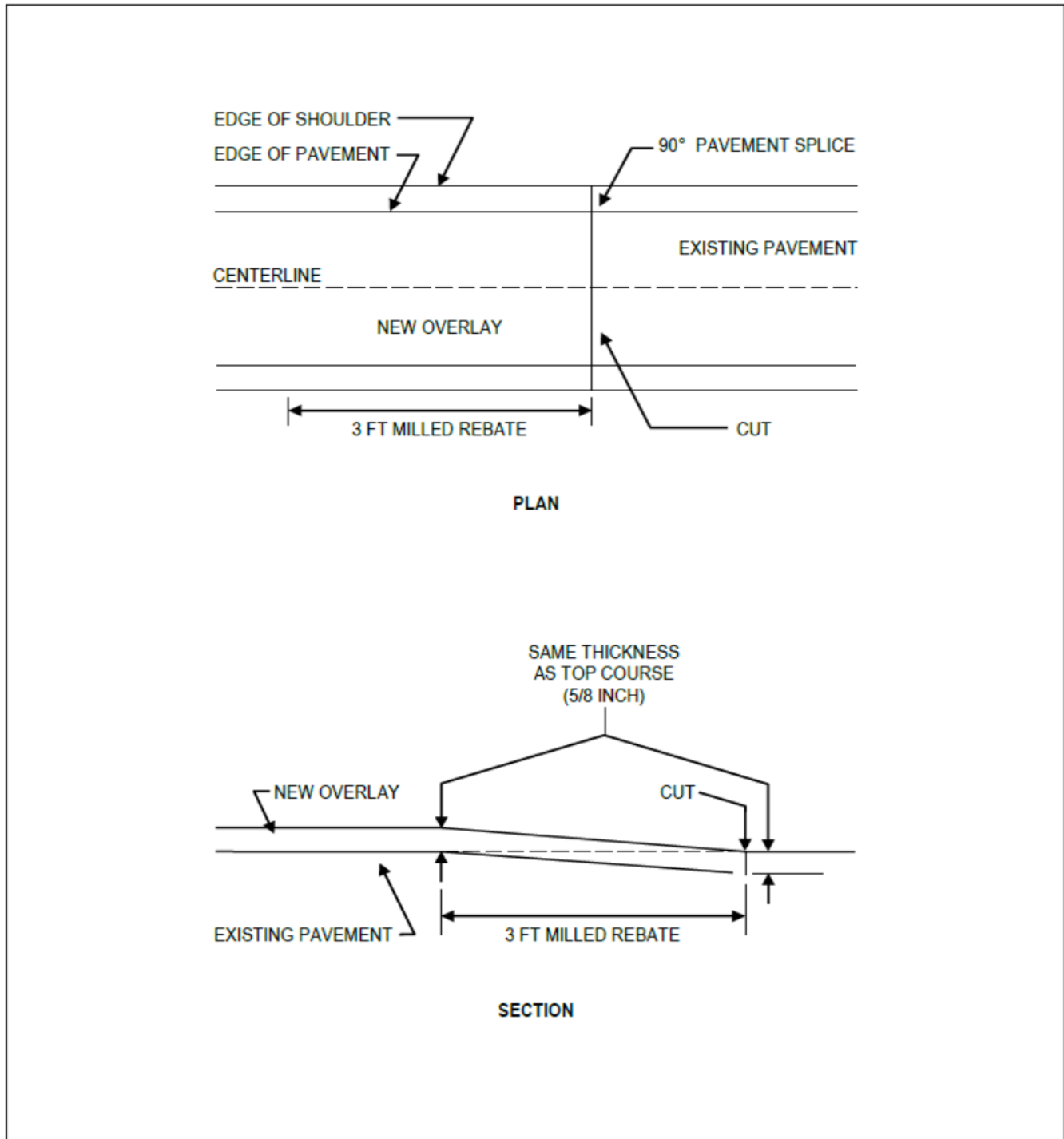
All necessary flaggers for Work Zone Traffic Control shall be provided by the Contractor. For two-way roadways, a minimum of three flaggers shall be provided while the work operation is underway. One shall be stationed at each end of the applicable operation and one shall be stationed with the operation. For one-way roadways, a minimum of two flaggers shall be provided while work operation is underway.

One shall be stationed at the beginning of the applicable operation and one shall be stationed with the operation. The Contractor shall station flaggers such that communication is maintained between the flaggers. Hand signals, radios, pilot vehicles, or some other means of communication may be used subject to the approval of the Resident Engineer.

All costs of Work Zone Traffic Control as prescribed by this specification including flagging, temporary pavement marking and/or delineation, and construction signs, are to be included in the unit price bid. No separate payment shall be made.

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

Paver Placed Surface Treatment Overlay Splice:



SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

3.13.1 Permanent Construction Signs

The Contractor shall provide construction signs as specified in Section 619-1 through 619-3 of the Standard Specifications and in the MUTCD. At minimum the Contractor shall install the following permanent construction signs:

SIGN	MINIMUM SIZE	LOCATION
ROAD WORK NEXT _____ MILES	<u>G20-1</u> Conventional 36" x 18" Freeways 48" x 24"	On main line upstream of project in each direction
END ROAD WORK	<u>G20-2</u> Conventional 36" x 18" Freeways 48" x 24"	On main line after end of project in each direction
ROAD WORK AHEAD	<u>W20-1</u> Conventional 36" x 36" Freeways 48" x 48"	On main line in advance of the affected highway segment in each direction and on major intersecting roads 300 -500 feet in advance of main line. Sign should be covered if it conflicts with temporary signing in the vicinity. (Place between the G20-1 and the first warning sign that states condition- i.e. W8-12, W8-9 or W8-15)
DO NOT PASS	<u>R4-1</u> Conventional 24" x 30"	If 2' x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign at or within 100 feet of the beginning of the unmarked area, second within 1,000 feet and subsequent signs, spaced every ½ mile along project in each direction
NO CENTER LINE	<u>W8-12</u> Conventional 36" x 36"	If 2' x 4" temporary yellow markings are used instead of full barrier centerline pavement markings, place the first sign in advance of the condition and the first "DO NOT PASS" sign: 300' urban is preferred (100' minimum), 500' rural is preferred (200' minimum). Place additional signs spaced every 2 miles on mainline in each direction and after every major intersecting road.
LOW SHOULDER	<u>W8-9</u> Conventional 36" x 36" Freeways 48" x 48"	Place on mainline spaced every 2 miles along project in each direction and after every major intersecting road until shoulder back-up is installed (if conditions warrant use, place between the W8-12 and R4-1, maintaining a minimum of 200' between signs for rural roads and 100' on urban. The W8-12 can be moved upstream to accommodate the required spacing.)
GROOVED PAVEMENT	<u>W8-15</u> Conventional 36" x 36" Freeways 48" x 48"	On any roadway 500 feet in advance of rebates milled under this contract, but not paved. Remove or cover after paving rebate.

**All signs should maintain an absolute minimum spacing of 200' rural or 100' urban. 500' is preferred on rural and 300' is preferred on urban. Double stacking of any of the above signs, or combination thereof, will NOT be permitted.

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

Major intersecting roads are defined as through State, County, Town, Village, or City roads. The Contractor may provide Portable signs as shown in Figure 6F-2 of the MUTCD and meeting the requirements of Section 619 of the Standard Specifications for lane closures during work hours. Signs left active at night shall be rigid and reflectorized in accordance with the Standard Specifications.

With prior permission of the State's Resident Engineer, the Vendor may provide portable signs as shown in Figure 6F-2 of the MUTCD for the above referenced DO NOT PASS and NO CENTER LINE signs. The Contractor shall be responsible for assuring that these signs will be in their upright, visible positions twenty-four hours a day, seven days a week while 2' X 4" temporary yellow markings are used instead of full barrier pavement markings.

3.13.2 Temporary Pavement Markings

The Contractor shall install and maintain temporary pavement markings on any paved surface without permanent pavement markings before opening it to traffic, before nightfall or before the end of the work day, whichever comes soonest except for areas that are open during the work shift with channelizing devices or flaggers. Temporary pavement markings shall meet the requirements of Section 619 of the Standard Specifications except that two-lane, two-way highways may be left without full barrier centerlines in no passing zones for a maximum of 7 calendar days provided that NO CENTER LINE (W8-12, black on orange), NO PASSING ZONE (W14-3, black on orange pennant shaped sign), and DO NOT PASS (R4-1) signs are used consistent with the MUTCD and in conjunction with yellow 2 foot by 4 inch temporary markings consisting of retroreflective removable pavement marking tape, paint or yellow temporary overlay markers installed on a 40 ft. cycle to delineate the centerline location.

The State is responsible for the final pavement markings unless otherwise indicated in the contract. If the vendor chooses to install NO CENTER LINE and DO NOT PASS signs and temporary yellow 2 foot by 4 inch pavement markings in lieu of full barrier centerline markings, the signs shall be left in place until the state has completed installing the final pavement markings. The state will normally complete final pavement markings within 7 days of the project completion. However, if unavoidable situations delay the pavement marking installation the signs shall remain in place for 14 calendar days after the project has been completed or until the state has completed installing the final pavement markings, whichever comes first. If permanent pavement marking cannot be installed within 14 days of the project completion, state must install interim pavement marking including center lines, edge lines, stop bars, and simple crosswalks with no hatching before the end of 14 days after project completion.

All costs for Work Zone Traffic Control including flagging, temporary pavement markings, delineation, and construction signs are to be included in the prices bid per ton or square yard as applicable.

3.13.3 Abrading Existing Pavement Markings

The Contractor shall remove any epoxy or thermoplastic pavement markings. Other markings shall be removed as ordered by the Resident Engineer. Care shall be taken to avoid damage to passing traffic. All damage to passing traffic caused by the Contractor's operations shall be the Contractor's responsibility. Waste material generated by the abrading operation shall be cleaned up and disposed of by the Vendor.

When the Contractor abrades the existing pavement markings, the Contractor shall place temporary pavement markings as specified elsewhere in this Invitation for Bids under Work Zone Traffic Control, unless the paving material will be placed the same day as pavement markings are abraded. The Contractor shall make every effort to expeditiously place the paving material in areas where pavement markings have been abraded and temporary pavement markings are in place. Under no circumstances will temporary pavement markings be allowed for more than five calendar days in areas where pavement markings have been abraded. In this event, the Contractor shall be required to place full pavement markings at no cost to the state. During the pavement markings abrading operation, traffic will be controlled by the Contractor in accordance with the Work Zone Traffic Control requirements included herein. The Contractor shall submit a proposed Traffic Control Plan to the Resident Engineer for approval. The plan may be based on the Work Zone Traffic Control drawings included in this Invitation for Bids.

Payment for pavement marking abrading shall be included in the price bid per ton of paver placed surface treatment. No separate payment shall be made.

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

3.13.4 Special Note: Work Zone Intrusion Initiative

As part of the Department of Transportation's Work Zone Intrusion Initiative, the following countermeasures shall apply to this Invitation for Bids.

Channelizing Device Spacing Reduction

A maximum channelizing device spacing of 40 ft. shall be provided at work sites where workers are exposed to traffic. This spacing shall be maintained a reasonable distance upstream of workers and shall be used throughout the work zone.

Where tapers are located less than 500 ft. from the work site, the 40-ft. spacing shall be used in the tapers as well.

Drums or vertical panels are preferred for intermediate to long-term stationary work zones, and at any locations where the risk of intrusion is high. Traffic cones are normally adequate for work zones set up and removed on a daily basis.

In long lane or shoulder closures, at least two channelizing devices shall be placed transversely at maximum 800 ft. intervals to discourage traffic from driving through the closed lane. Transversely placed devices are not required where pilot car are in use.

Frequent checks shall be made to reset channelizing devices dislodged by traffic.

Flagger Station Enhanced Setups

Additional cones and a flag tree meeting Section 6F.62 of the MUTCD shall be used upstream of flagger stations to provide added warning to drivers. These devices shall be used for flagger stations except those that are constantly moving or are in use at one location for no more than a few minutes. If the W20-7a Flagger sign is used, the additional cones and flag tree shall also be used.

For additional details on Flagger Station Enhanced Setups, see Work Zone Traffic Control drawings in this Invitation for Bids.

Temporary Rumble Strips

a. Description

This work shall consist of the installation, maintenance and subsequent removal of temporary rumble strips in paving work zones where indicated in the Invitation for Bids or as directed by the Engineer.

b. Materials

Rumble strips shall be either constructed in place from a raised strip of asphalt concrete or constructed in place with removable pavement marking tape. Raised removable tape rumble strips shall be formed by applying four layers of removable black non-reflectorized removable pavement marking tape. The tape shall be applied to a clean, dry pavement surface in accordance with the manufacturer's recommendations. The pavement surface shall be cleaned with compressed air just prior to application of the tape.

Raised asphalt rumble strips shall be formed from hot mix asphalt meeting the requirements of Items 402.058904 or 402.098904. Tack coat meeting the requirements of Materials Designation 702-XXXXT Asphalt Emulsion Diluted Tack Coat shall be used to adhere the rumble strip to the existing pavement. Temporary rumble strips shall be formed using a specially constructed rumble strip paver (drag box) pulled transversely across the pavement, or by hand placement between forms fixed to the pavement. If forms are used, they shall be removed prior to compaction of the asphalt mixture. Compaction shall be accomplished using a plate tamper or a static roller. The roadway surface on which the rumble strips are to be attached shall be dry, free of surface contaminants such as dust or oil, and shall be 45°F or greater unless otherwise authorized by the Engineer. The pavement surface shall be cleaned with compressed air just prior to tack coating and subsequent installation of rumble strips.

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

Temporary rumble strips shall be placed in a succession of three 6-Strip Patterns according to the attached “Suggested Layout Details - Temporary Rumble Strips”. Each strip shall be placed on 10 foot centers and traversing the full width of each travel lane. On curbed roadways, rumble strips shall end a minimum of 3 feet from the curb so as to not interfere with drainage. Rumble strips shall be between 6 inches and 9 inches in width and have a final compacted thickness of 0.4 inches \pm 0.1 inches.

Any raised rumble strips that fail to adhere to the pavement, or become damaged or flattened such that, in the opinion of the Engineer, they are no longer performing their intended function, shall be replaced or repaired by the Contractor to the satisfaction of the Engineer. Any associated damage to the pavement shall also be repaired by the Contractor to the satisfaction of the Engineer. These replacements or repairs shall be made at no additional expense to the Purchasing Agency.

When directed by the Engineer, (e.g., prior to the start of the winter plowing season), or prior to the placement of successive pavement courses, the Contractor shall completely remove the rumble strips from the pavement. Rumble strips shall be removed upon completion of work and concurrently with the removal of other temporary traffic control signs and devices. Any pavement that is damaged in the process of removing the rumble strips shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the Purchasing Agency.

c. Basis of Payment

All costs for the installation, maintenance and removal of temporary rumble strips are included in the price per ton or square yard as appropriate. No separate payment shall be made.

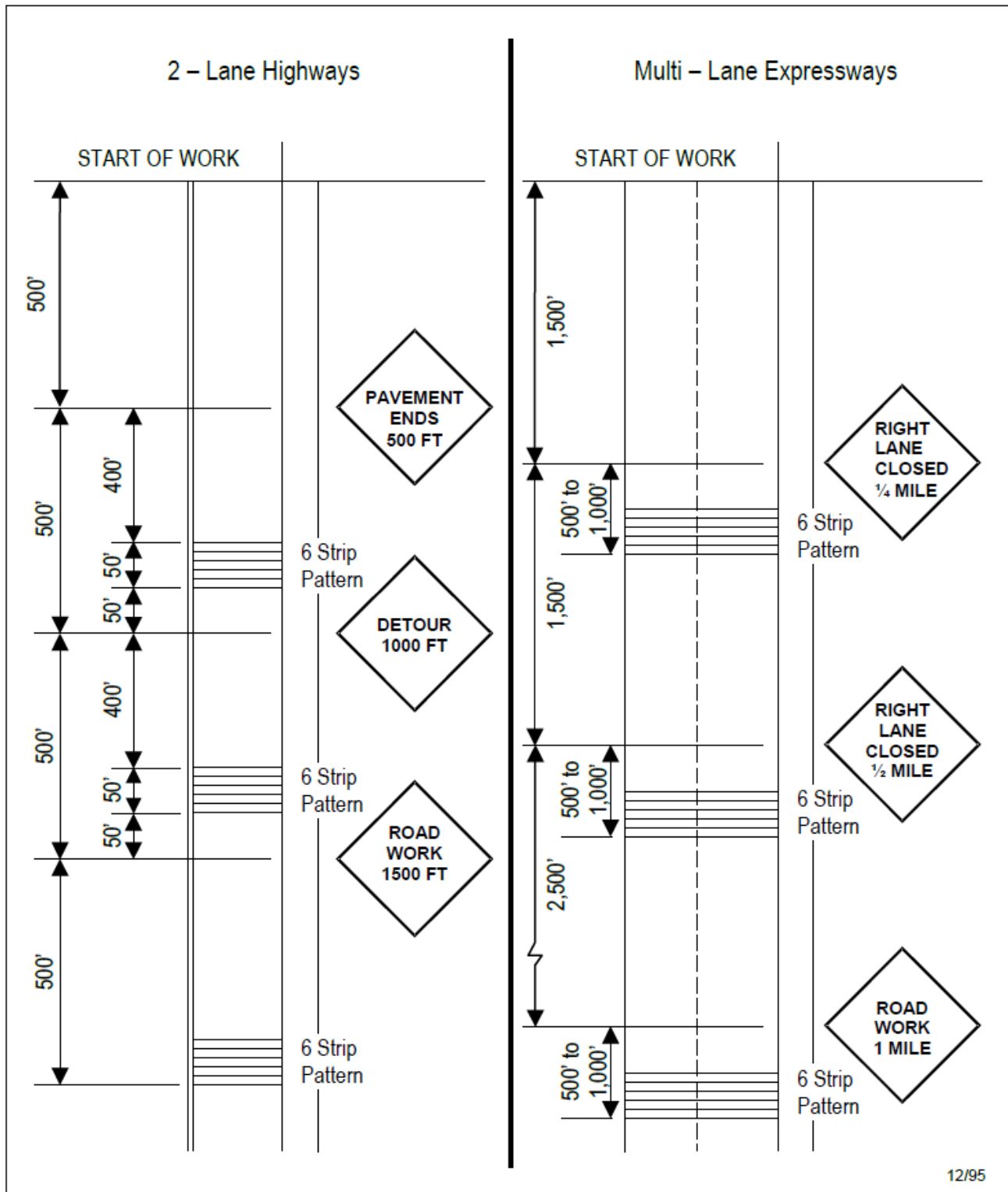
d. Suggested Layout Details Drawing-- Temporary Rumble Strips

See the Suggested Layout Details Drawing in the **next page**.

(Continued on next page.)

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

Suggested Layout Details -- Temporary Rumble Strips



SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

3.14 Special Notes – Paver Placed Surface Treatment

3.14.1 Funding Source (Paver Placed Surface Treatment)

Projects 6V2123B will be funded by Federal Aid.

3.14.2 Special Note for Coordination with Other Projects (Paver Placed Surface Treatment)

Prior to paver placed surface treatment, Project 6V2123B involve heater scarification through separate contractor. These paver placed surface treatment project require that the paver placed surface treatment contractor coordinates their work with the corresponding heater scarification contractor to allow required curing period before placing the paver placed surface treatment as well as to minimize disruption to the traveling public and the time traffic is running over a recycled surface.

3.14.3 NYSDOT REGION 6 General Special Notes (Paver Placed Surface Treatment)

To minimize travel delays associated with major holidays, no work shall be permitted during the following periods:

6:00 am Friday, May 28, 2021 thru 6:00 am Tuesday, June 1, 2021 - (Memorial Day Holiday)

6:00 am Friday, July 2, 2021 thru 6:00 am Tuesday, July 6, 2021 - (July 4th Holiday)

6:00 am Friday, September 3, 2021 thru 6:00 am Tuesday, September 7, 2021 - (Labor Day Holiday)

Region 6 Liquid Paver Placed Surface Treatment project shall be completed **no later than August 31, 2021**. A schedule reflecting this shall be submitted before start of work to the Region's ARDO Gary Shepard, for approval.

The Region requests all Preconstruction paperwork be submitted electronically as .pdf files to Gary.Shepard@dot.ny.gov prior to the preconstruction meeting, or all documentation be brought to the Preconstruction meeting electronically as .pdf files on a CD or USB "thumb" drive that will not be returned to the contractor.

In lieu of longitudinal cones full project length between open and closed lanes of traffic, the contractor may elect to substitute, when using pilot vehicles, use of cones placed transversely across the closed lane at intervals per section 619-3.02 J.2 (every 800') and at strategic locations, such as intersections and driveways. All work zone signs will be at a minimum of 5' tall from the bottom of sign panel.

Paint with beads is the only option permitted in Region 6 for temporary and interim pavement markings, unless approved on a case by case basis by the Resident Engineer. Offset the centerline temporary/interim pavement markings so that the permanent markings will cover up the temporary/interim markings, as follows: 8" centerline offset for 2 lane roads, 6" centerline offset for multi-lane roadways.

All stockpile, spoils, and clean-out sites need to be preapproved by the Regional Maintenance Environmental Coordinator, Ruth Hart, prior to use.

Project Specific Special Notes:

6V2123B- This project will take place between RM 21-6402-3316 to 36-6401-3036. Pavement will be placed in 2 lifts at 0.75" depth. All Intersections, turning lanes and ramps will be tied in.

Production milling will be performed by State Forces underneath BIN's 1028621 and 1028622 on SR 36. This will require coordination between the Paving Contractor and State Forces.

SECTION 3: PAVER PLACED SURFACE TREATMENT - SPECIFIC PROJECTS (Cont'd)

Abrading Existing Pre-Formed & Epoxy Pavement Markings

The Contractor shall remove any pre-formed and epoxy pavement markings. Care shall be taken to avoid damage to passing traffic. All damage to passing traffic caused by the Contractor's operations shall be the Contractor's responsibility. The contractor shall make every effort to expeditiously place the HMA in areas where the markings have been abraded. Under no circumstances will temporary pavement markings be allowed for more than five calendar days in areas where markings are abraded. In this event, the contractor shall be required to place full pavement markings at no cost to the State. During the abrading operation, traffic shall be controlled by the contractor in accordance with Work Zone Traffic Control requirements included herein. The contractor shall submit a proposed Work Zone Traffic Control Plan to the Resident Engineer for approval. The plan may be based on the Work Zone Traffic Control drawings included in the Invitation for Bids. Payment for abrading shall be included in the price bid per ton for the HMA. No separate payment shall be made.

3.15 Detailed Specifications – Paver Placed Surface Treatment

Please, see Attachment 10 – *Detailed Specifications – Liquid Bituminous Materials*

3.15.1 Project Dimensions – Paver Placed Surface Treatment

Information on pavement widths for projects in this Invitation for Bids is listed for informational purposes only. The dimensions listed in Attachment 12 – Project Dimensions are the best information available, but 100% accuracy is not guaranteed. Bidders should visit the project site to confirm the dimensions given and familiarize themselves with the project particulars before submitting a bid. NYS OGS/NYS DOT assumes no responsibility for erroneous information listed herein.

Please refer to Attachment 12 – Project Dimensions for the Project Dimensions Data.

3.15.2 Rebates – Paver Placed Surface Treatment

Please refer to Attachment 12 – Rebates for the overlay splices (rebates) data.